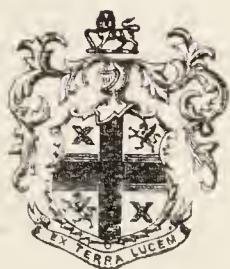






COUNTY BOROUGH OF ST. HELENS



Annual Report  
OF THE  
Medical Officer of Health,  
FOR THE YEAR, 1923.

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FRANK HAUXWELL, M.B., Ch.B., D.P.H.

Medical Officer of Health,  
and School Medical Officer.

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St. Helens:  
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—  
1924.



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TO THE MAYOR, ALDERMEN AND COUNCILLORS  
OF THE COUNTY BOROUGH OF ST. HELENS.

**Mr. Mayor, Ladies and Gentlemen,**

I have the honour to submit the 51st Annual Report on the health of the Borough for the year ending 31st December, 1923.

The form of the report follows the lines of the previous year, and is the third of the series of short or "ordinary reports" required by the Ministry of Health.

According to the estimate of the Registrar General, the mid-year population of the Borough was 107,100. The birth rate for the year was 24.4 per thousand of the population, and the natural increase of population during 1923 was 1338.

The death rate was 11.9 per 1,000 of the population, and the Infantile Mortality 91.3 per 1,000 births.

Both these rates are the lowest ever recorded for the Borough, and it is the first time on record that the Infantile Mortality Rate for St. Helens has fallen below 100 deaths per 1,000 beds. For the 105 Great Towns of England and Wales during the same period the death rate was 11.6 per thousand of the population, and the infantile mortality 72 per 1,000 births.

That the death rate and the infantile mortality for 1923 should be so low is extremely satisfactory, but public health work must be unceasing and ever expanding if progress is to be maintained.

I take this opportunity of thanking members of the Council for the kindness and consideration displayed to me in the conduct of my work, and I have to record my hearty appreciation of the loyal and willing co-operation of all members of my staff.

I have the honour to be,  
Your obedient Servant,  
FRANK HAUXWELL.

September, 1924.

## GENERAL STATISTICS.

Area (Acres)	...	...	...	.....	...	7284
Population (Census, 1921)	...	...	...	...	...	102640
Estimated Population mid-year 1923	...	...	...	...	...	107100
*Number of structurally separate sets of premises intended or used for habitation	...	...	...	...	...	18516
*Number of families or separate occupiers	...	...	...	...	...	19688
Rateable Value (year ending 31st March, 1924)	...	...	...	...	...	£389109
Sum represented by a penny rate	...	...	...	...	...	£1470

\* From Census, 1921.

A structurally separate set of premises may be defined as any room, or set of rooms, having separate access either to the street or to a common landing or staircase. The figure furnished includes a small number of premises, which, for one reason or another were vacant on census night.

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## STAFF.

Medical Officer of Health, Administrative Tuberculosis Officer, and School Medical Officer :

Frank Hauxwell, M.B., Ch.B. (Glasgow) D.P.H. (Camb.)

Deputy Medical Officer of Health :

A. A. Turner, M.C., M.B., Ch.B. (Aberdeen), D.P.H.  
Resigned Oct. 31st, 1923.

W. Howard Blackburn, M.A., M.B., B.Ch., M.R.C.S.,  
L.R.C.P., D.P.H. (Camb.)

Appointed Deputy Medical Officer as from 1st Nov., 1923.  
Appointed Assistant Medical Officer as from 14th Feby., 1923.

Assistant Medical Officers of Health :

A. J. B. Griffin, M.B., B.S., D.P.H.  
Resigned Jan. 31st, 1923.

Margaret A. Reid, M.B., Ch.B. (Aberdeen).  
Resigned Aug. 25th, 1923.

J. A. Fraser, M.B., Ch.B. (Edinburgh), D.P.H. (Edinburgh)  
Appointed as from Dec. 11th, 1923.

Eileen Dowling, M.B., B.Ch. (Liverpool), L.M. (Dublin).  
Appointed as from Dec. 11th, 1923.

Hugh McLean, B.Ch. (Cantab.), M.R.C.S., L.R.C.P., D.P.H.  
(Camb.).  
Appointed temporarily as from Aug. 27th to Dec. 10th.

## Dental Surgeon :

R. M. Timperley, L.D.S.

## Sanitary Inspectors, etc. :

W. J. Milligan (1).....	Chief Sanitary Inspector.
H. Brown (1), (4), (5), (6), (8).....	Sanitary Inspector.
H. Lowe (4), (6).....	do.
J. Skeath (4) .....	do.
T. Blashill (1), (5).....	Superintendent of Public Abattoir.

## Matron of Corporation Hospitals :

Edith Carder.

## Health Visitors, School Nurses and Tuberculosis Nurses :

Ethel Denman, (1), (2), (3), (7)	*May Ritson, (2), (3), (7)
Grace Healey, (2), (3), (7)	*Elizabeth Purcell, (2), (3), (7)
Ada Rogerson, (2), (3)	Dorothy Grime, (2), (3), (7)
*Arianwen Hughes, (2), (3), (7)	*Ada Hare, (3), (7)
*Jennie Coates (2), (3), (7)	*Elizabeth Starke, (2), (3), (7)
Florence Faber (3), (7)	Gertrude Jackson, (1), (3), (4), (7)
Mary Riding (3), (7)	Louisa Austin, (3), (7)
Winifred Cowan (2), (3), (7)	Ada Anson, (3), (7)
*Elizabeth Ravenscroft, (2), (3), (7)	Carolyn Mellor, (3), (7)
Florence Wilkinson, (7)	May Dyer, (3), (7)
Amy Coates, (2), (3), (7)	Emily Corrish, (2), (3)
*Mary Tytler (7)	Winifred Bishop (3), (7)
	Emily Smith, (3), (7)

(\*) Resigned during the year.

(1) Sanitary Inspector's Certificate of the Royal Sanitary Institute.

(2) Health Visitor's Certificate of the Royal Sanitary Institute.

(3) Certificate of the Central Midwives Board.

(4) Sanitary Inspector's Certificate of the Liverpool University.

(5) Certificate for Meat Inspection of the Royal Sanitary Institute.

(6) Certificate for Meat Inspection of Liverpool University.

(7) A trained Nurse.

(8) Certificate for Building Construction, first stage.

## The following are part time officers :

J. Unsworth, M.B., B.S., Lond. ....	Physician to the X-ray Department, Tuberculosis Dispensary.
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H. E. Davies, M.A., B.Sc., F.I.C. ....	Public Analyst.
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R. F. Watson, M.R.C.V.S. ....	Veterinary Inspector.
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## I.—METEOROLOGY.

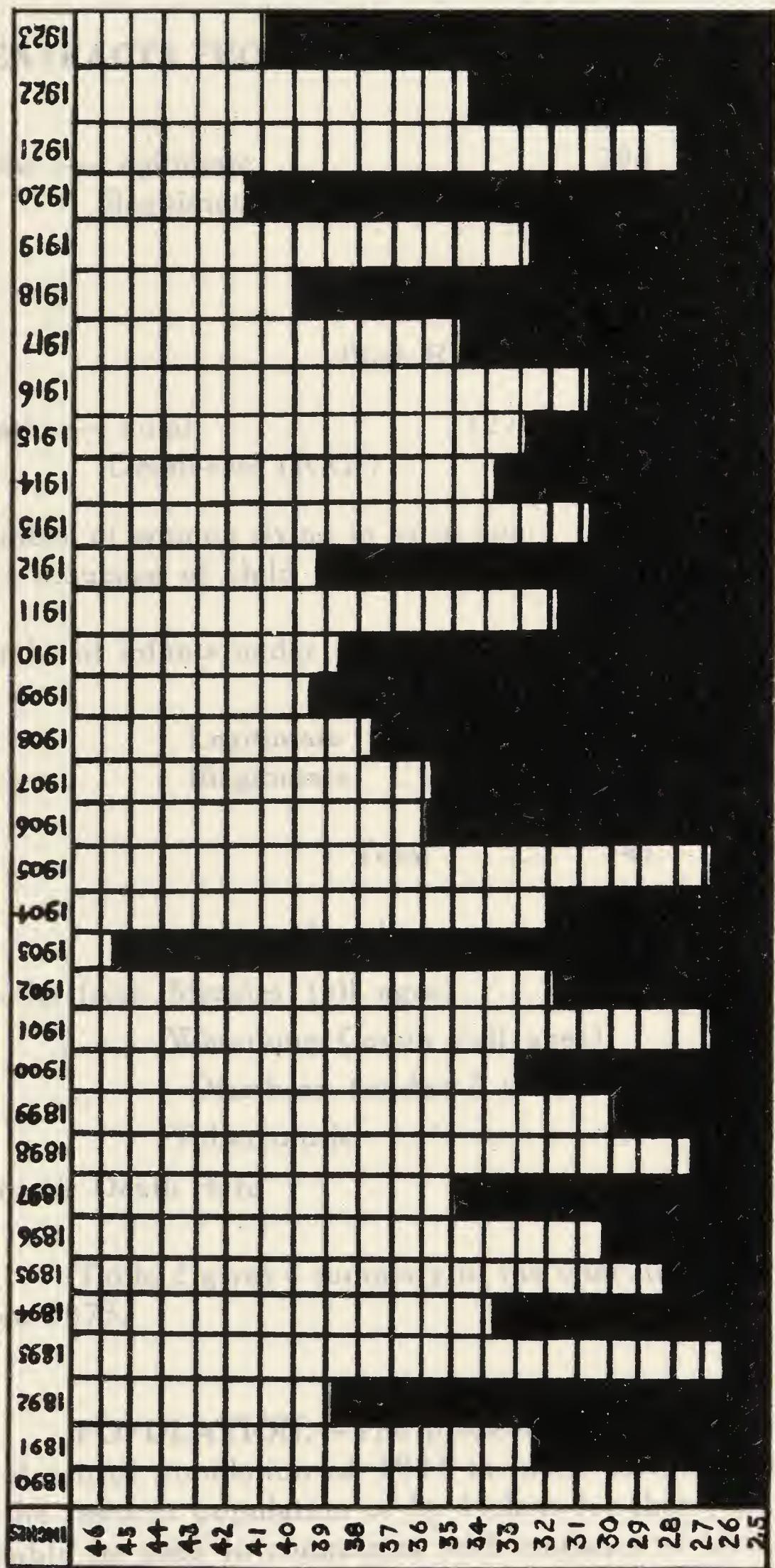
At the Corporation observatory in Victoria Park readings are taken once a day at 9 a.m.

The total rainfall for the year was 40.98 inches. The annual rainfall since 1890 is shown in Table 1. The highest temperature in the shade during the year was on July 6th when it reached 86.5°F. The lowest was 24.8°F on the 24th December.

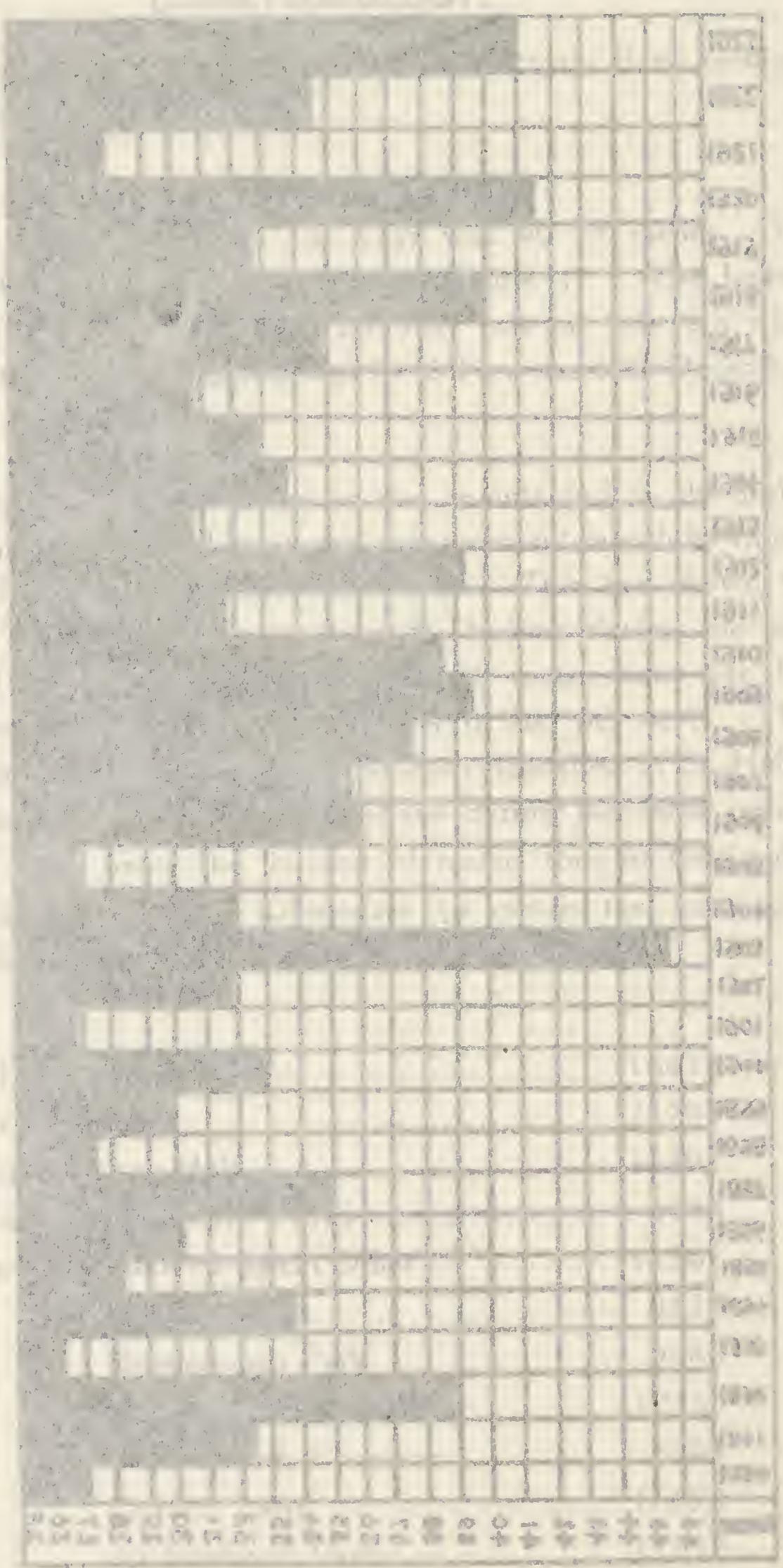
A special deposit gauge is also maintained in the police parade ground for the collection and measurement month by month of the amount of atmospheric pollution. This has shown the amount of total solids deposited in St. Helens during the year April 1923 to March 1924, to be 16632 metric tons per 100 square Kilometres or approximately 1496 lbs. per acre. The accompanying statement shows the amount deposited in St. Helens as compared with that at other stations during the same period, the figures given being the number of metric tons of total solids deposited per 100 square Kilometres (a metric ton per square Kilometre is approximately 9 lbs. per acre).

St. Helens .....	16632
Liverpool .....	25794
Kingston-upon-Hull .....	15792
Southport (Hesketh Park).....	5004
London—Meteorological Office .....	12267
Finsbury Park .....	9138
Ravenscourt Park .....	9686
Southwark Park .....	12155
Wandsworth Common .....	8993
Golden Lane .....	16673
Archbishops Park .....	11958
Victoria Park .....	9190

TOTAL RAINFALL IN INCHES IN ST. HELENS SINCE 1890.



LOWEST BOUNDARY WHICH IT HAS BEEN SINCE 1930.



## II.—VITAL STATISTICS.

### EXTRACTS FROM VITAL STATISTICS OF THE YEAR :

		M.	F.	Total.
Births :—	Legitimate ...	1294	1245	2539
	Illegitimate ...	42	34	76
	Totals ...	1336	1279	2615

Birth Rate ... 24.4

Deaths :—	Total ...	1277
	Death-rate (R.G.) ...	11.9

Number of women dying in or in con-	from Sepsis ...	... 1
sequence of child birth ... 3	from other causes ...	2

### Deaths of infants under one year of age :—

		M.	F.	Total.
Legitimate ...	...	138	89	227
Illegitimate ...	...	5	7	12
	Total ...	143	96	239

Infant Mortality ... 91.3

Deaths from Measles (all ages) ...	...	...	...	...	0
„ Whooping Cough (all ages) ...	...	...	...	...	10
„ Diarrhoea (under 2 years of age) ...	...	...	...	...	19
„ Tuberculosis ...	...	...	...	...	112
Zymotic Death Rate ...	...	...	...	...	0.39

Table 2 gives a summary of the vital statistics for St. Helens since 1873.

**POPULATION.**—The procedure followed in adjusting the local census population of 1921 in order to arrive at an estimate of the resident population of St. Helens for that year, which could suitably be used in connection with statistics of births and deaths is described in the Annual Report for 1921.

Table 2.  
Statistics for St. Helens since 1873.

YEARS	Population.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality Rate.	Rate of Persons Married.	DEATHS FROM							
							Small Pox.	Measles.	Scarlet Fever.	Typhoid Fever.	Typhus Fever.	Diarrhea.	Whooping Cough.	Diphtheria.
1873	45,500	46.6	23.6	2.75	148		4	19	99	20	0	94	9	25
1874	46,188	46.3	31.4	5.03	198		0	29	238	19	0	110	41	26
1875	48,668	45.4	24.6	2.51	138		0	4	21	45	0	101	31	41
1876	52,246	45.6	23.2	3.20	149		0	101	21	42	0	94	7	30
1877	54,463	44.3	22.8	2.09	150		0	2	12	22	0	77	48	31
1878	57,534	43.2	23.9	3.09	165		0	4	22	35	0	135	15	74
1879	57,522	41.1	22.4	5.51	136		0	143	82	31	0	52	2	29
1880	58,807	41.6	20.0	2.92	169		0	0	27	32	0	131	71	8
1881	57,575	43.5	21.6	2.03	128		0	14	27	45	0	76	3	22
1882	58,903	43.7	25.4	4.95	180		0	205	35	24	0	85	36	38
1883	60,263	40.69	21.65	2.5	143		0	3	14	31	0	69	24	11
1884	61,584	42.50	24.16	5.3	173		0	131	16	33	2	131	9	11
1885	62,932	39.93	23.32	3.5	168		0	81	13	7	1	56	53	11
1886	64,311	40.70	22.46	5.2	172		0	102	34	28	0	122	41	10
1887	65,718	37.00	21.69	3.9	163		0	53	35	34	0	101	28	11
1888	67,158	39.20	19.80	3.1	151		0	38	11	22	0	65	61	21
1889	68,628	39.86	23.50	4.18	177		0	78	3	81	1	85	15	29
1890	70,132	38.90	25.43	5.3	170		0	19	181	24	1	74	68	13
1891	71,509	40.80	26.02	3.0	180		0	54	24	26	0	78	29	9
1892	72,399	40.2	21.0	2.64	147		1	23	18	25	0	84	31	12
1893	73,576	41.3	24.4	5.4	196		5	135	6	52	0	168	19	16
1894	*76,112	37.8	18.3	2.21	161	14.6	0	21	14	26	2	38	61	10
1895	77,288	40.9	21.8	3.10	181	13.0	1	54	9	59	0	101	14	8
1896	78,482	38.7	20.9	3.73	177	13.2	0	38	59	40	0	63	78	17
1897	79,694	40.0	21.8	4.3	181	14.2	0	87	44	33	0	133	33	20
1898	80,926	40.3	19.9	3.2	172	14.2	0	17	24	30	0	140	34	16
1899	82,176	38.3	20.4	2.9	157	13.0	0	21	8	43	0	114	41	15
1900	83,445	37.1	22.8	3.2	188	13.0	0	59	25	19	0	91	56	19
1901	84,734	36.9	19.7	2.56	175	13.9	0	7	29	34	0	95	17	3
1902	86,043	37.4	19.7	2.60	167	11.4	0	59	52	25	0	50	18	20
1903	87,372	39.1	17.5	1.72	138	13.0	0	1	26	18	0	53	30	23
1904	88,722	37.4	20.9	3.96	174	12.9	3	131	17	13	0	120	49	22
1905	89,843	36.05	17.2	1.88	132	11.7	0	41	16	2	0	66	26	18
1906	91,153	33.9	17.3	1.79	159	11.9	0	10	4	18	0	105	5	22
1907	92,476	34.1	18.3	2.87	155	13.6	0	145	10	12	0	36	52	11
1908	93,812	35.2	16.0	1.32	122	12.3	0	0	29	12	0	59	7	17
1909	95,161	32.0	18.5	3.5	149	12.7	0	188	33	13	0	27	62	12
1910	96,523	32.7	14.5	1.26	121	13.1	1	15	22	10	0	51	16	7
1911	96,870	33.5	18.3	3.03	158	12.7	0	69	13	22	0	143	39	8
1912	98,159	31.9	15.5	1.76	124	14.0	0	62	19	8	0	49	46	19
1913	99,460	32.1	18.9	3.74	155	14.6	0	189	26	4	0	120	18	15
1914	100,775	33.3	17.0	1.62	138	14.1	0	25	5	4	0	98	24	8
1915†	92,240	32.1	19.3	3.1	129	16.1	0	126	12	6	0	78	40	32
1916†	90,000	26.5	16.8	1.95	108	14.9	0	2	30	2	0	64	34	85
1917†	90,600	22.0	16.53	2.26	123	10.60	0	65	20	2	0	37	19	79
1918†	90,600	24.1	21.2	2.45	126	11.4	0	26	24	0	0	48	24	100
1919†	100,805	25.5	15.0	0.82	117	17.5	0	5	9	2	0	35	7	25
1920	104,822	31.8	13.5	1.2	113	16.8	0	56	7	0	0	44	7	13
1921	104,900	29.1	12.6	0.83	103	17.2	0	7	5	0	0	63	24	5
1922	106,400	26.4	13.4	0.93	115	11.5	0	60	4	2	0	28	3	5
1923	107,100	24.4	11.9	0.39	91	12.8	0	0	4	1	0	24	10	8

†Estimated civil population

\*Borough extended

The estimate of population as at 30th June, 1923, which is now given, has been based on the adjusted 1921 figures, after allowance for the varying rate of natural increase as evidenced by the births and deaths in the area, and of migration as indicated from other sources of information such as the changes in the numbers on the Parliamentary Register and the migration returns obtained by the Board of Trade. According to such an adjustment the estimated mid-year population of St. Helens for 1923, was 107,100.

The natural increase of population during 1923, i.e., the excess of the number of births over deaths was 1338 ; the natural increase in 1922 was 1382.

The distribution and density of the population in the different wards of the Borough at the Census of 1911 and at 1921, and the estimated population of each ward at mid-year 1923, are shown in Table 3.

Table 3.

	Area in Acres	Census 1911.		Census 1921.		Estimated population mid-year 1923
		Popula- tion	Persons per acre	Popula- tion	Persons per acre	
St. Helens C.B.	7284	96551	13.2	102640	14.1	107100
Central	94	6336	67.4	6403	68.1	6626
East Sutton	1312	11584	8.8	12308	9.4	12739
Hardshaw	343	11526	33.6	12048	35.1	12467
North Eccleston	235	12252	52.1	12670	53.9	13112
North Windle	697	12188	17.4	12269	17.6	13575
Parr	1485	12209	8.2	12899	8.7	13349
South Eccleston	622	11873	19.0	13618	21.9	14093
South Windle	67	8279	123.5	8047	120.1	8328
West Sutton	2429	10304	4.2	12378	5.1	12811

**BIRTHS.**—The number of births registered in St. Helens during 1923 was 2570. 75 births occurring in other districts were transferable to St. Helens and 30 occurring in the borough were transferred to other districts, making a total of 2615 births belonging to the borough. The birth rate for the year was 24.4 per 1000 of population, showing a decrease from the figure of 26.4 per 1000 for the previous year. The rate for England and Wales during 1923 was 19.7 and for the 105 County Boroughs and Great Towns 20.4 per 1000.

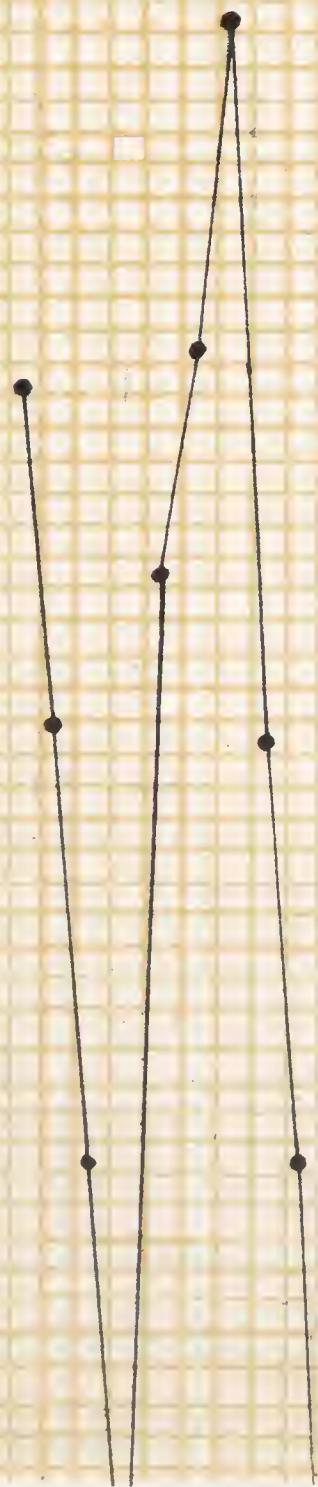
Table 4.  
Number of illegitimate births.

Years	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Number of illegitimate births	76	76	68	70	87	80	84	71	108	84	96	97	92	78	78	112	127	131	136	81	76
Proportion per 1,000 population	0.86	0.85	0.75	0.76	0.94	0.94	0.88	0.73	1.11	0.85	0.79	0.96	0.90	0.79	0.79	1.1	1.2	1.2	1.3	0.7	0.7

Table 5.  
Number of marriages.

Years	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Number of marriages	576	529	544	632	579	608	637	617	730	706	745	568	536	579	924	882	903	612	686	
Marriage rate per 1,000 population	12.96	11.76	11.93	13.6	12.3	12.7	13.1	12.7	14.09	14.6	14.01	14.5	11.58	10.60	11.4	17.5	16.8	17.2	11.5	12.8





31 86 4 2 30 86 4 2 29 86 4 2 28 86 4 2 27 86 4 2 26 86 4 2 25 86 4 2 24 86 4 2 23 86 4 2 22 86 4 2 21 86 4 2 20

TABLE 6.

BIRTH RATE - S<sup>T</sup> HELENS, 1873-1923.

RATE PER 1,000 OF THE POPULATION	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
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In St. Helens, the male births numbered 1336 and the female 1279, being a proportion of 1044 male to 1000 female children born.

Illegitimate births were 2·9% of the total, as compared with 2·8% in the previous year.

Table 7 shows the number of births notified in each ward during the year. Table 6 shows the birth rate in St. Helens since 1873, and Table 4 gives the illegitimate birth rate since 1903.

Table 7.

Showing the number of births in the wards notified during 1922, and the birth rates; also the number of deaths and the death rates in the wards—and figures for England and Wales.

WARD.	Number of births notified.	Birth-rate per 1000 population.	Number of deaths.	Death-rate per 1000 population.
North Eccleston	296	22·5	160	12·2
South Eccleston	309	21·9	150	10·6
Central ...	200	30·1	127	19·1
North Windle	287	21·1	187	13·7
South Windle...	182	21·8	115	13·8
Hardshaw ...	265	20·1	157	12·5
East Sutton ...	307	24·0	111	8·7
West Sutton ...	345	26·9	127	9·9
Parr ... ...	370	27·7	143	10·7
 Total ...	 2561	 23·9	 1277	 11·9
 England & Wales	 —	 19·7	 —	 11·6
 105 Great Towns	 —	 20·4	 —	 11·6

**MARRIAGES.**—The number of marriages during the year has been 686, giving a rate of persons married of 12·8 per thousand of the population. Table 5 shows the rate for past years.

**DEATHS.**—The number of deaths occurring within the borough during the year was 1167. This total includes 108 deaths

in St. Helens of persons usually resident in other areas, but excludes 218 deaths of persons usually resident within the borough which occurred in other areas, the actual number of deaths assignable to St. Helens being 1277. This gives a nett death rate of 11.9 per 1000 of the population, which is the lowest yet recorded for St. Helens.

A comparison of the death rate in St. Helens with the rate for England and Wales and for the great and smaller towns is shown in the following statement, which also gives the death rate for St. Helens for the previous year :—

England and Wales, 1923	...	...	11.6	per 1,000
105 County Boroughs and Great Towns, including London	...	...	11.6	per 1,000
157 Smaller Towns (1921 adjusted populations 20,000 to 50,000)	...	...	10.6	per 1,000
St. Helens, 1923	...	...	11.9	per 1,000
St. Helens, 1922	...	...	13.4	per 1,000

Table 7 gives the number of births and deaths occurring in the different wards during 1923, and Table 8 shows the death rate in the borough since 1873.

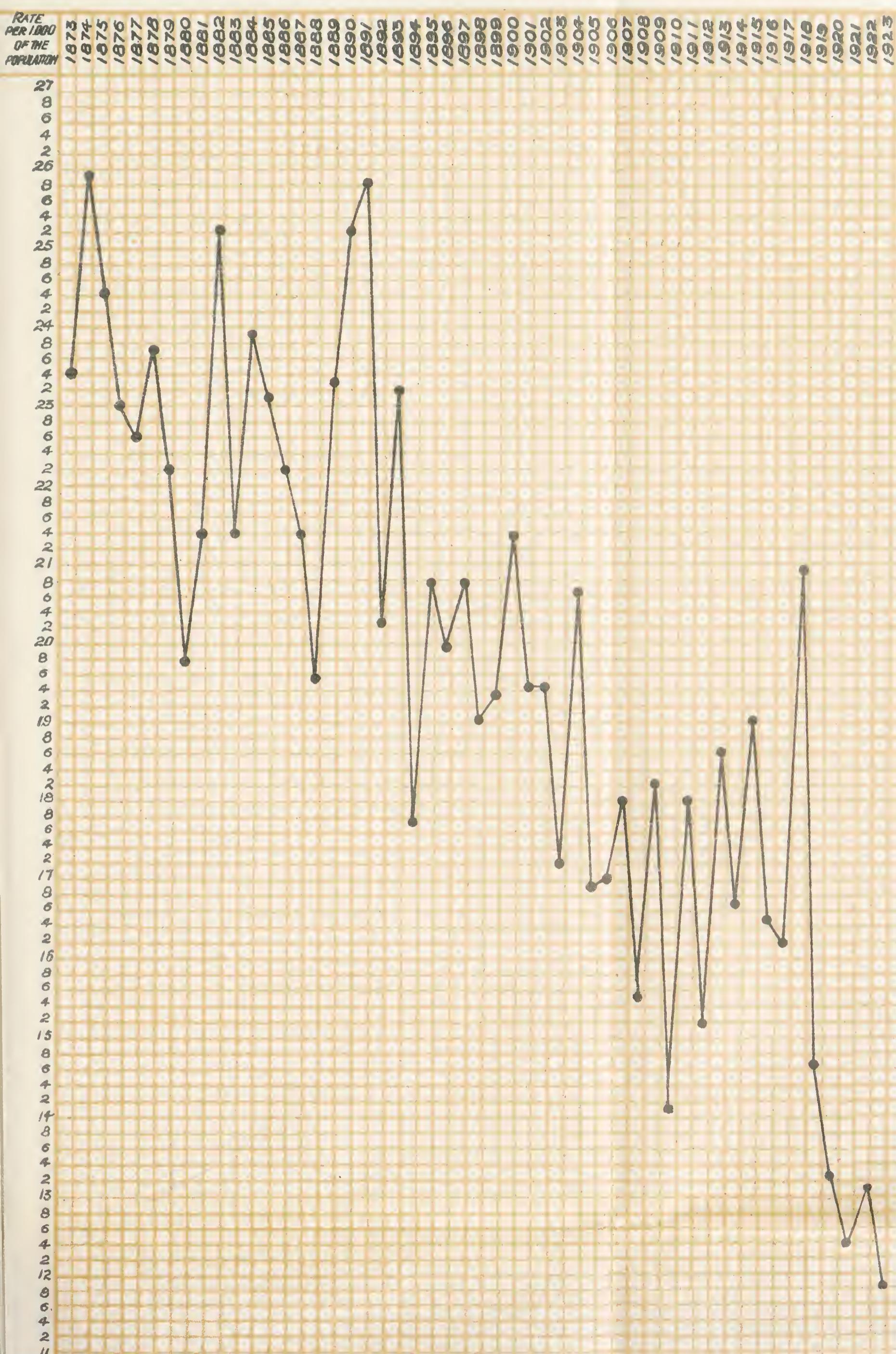
**Seasonal Deaths.**—The following table gives the number of deaths which occurred in St. Helens in each quarter of the year, with the death rate for each quarter, and the death rates for England and Wales for the same periods.

	No. of Deaths.	Death rate per 1000 of population			England & Wales	
		St. Helens				
First Quarter	...	390	...	14.5	...	13.2
Second Quarter	...	318	...	11.8	...	11.9
Third Quarter	...	262	...	9.7	...	9.4
Fourth Quarter	...	307	...	11.4	...	11.9

**Coroners Inquests.**—During the year 100 deaths were reported to the Coroner. In 34 of these the Coroner was able

TABLE 8.

## DEATH RATE - ST HELENS, 1873-1923.



The death rate is not corrected for age & sex distribution.



without an inquest to issue a certificate attributing the death to natural causes. In 66 instances an inquest was held, and in these cases the deaths were recorded as attributable to :—

Colliery Accidents .....	13
Street Accidents .....	9
Accidents on Railways .....	2
Accidents in Works .....	2
Drowning .....	10
Poisoning .....	1
Scalds and Burns .....	6
Other Deaths from violence .....	7
Natural Causes .....	11
Other Causes .....	5
	—
	66
	—

**Causes of Death.**—Figures relating to the causes of and ages at death during the year are given in Table 9.

**Zymotic death rate.**—The number of deaths caused by the seven “principle epidemic diseases” during 1923 was 42, giving a Zymotic death rate of 0.39 per 1000 of the population.

The causes of these deaths were as follows :—

Diarrhoea and enteritis (under 2 years)	19
Whooping Cough.....	10
Measles .....	0
Scarlet Fever.....	4
Diphtheria (including membranous croup)	8
Fever (enteric, typhus, and simple continued fever) .....	1
Small-pox .....	0

Table 2 shows the figures since 1873.

**Deaths from Tuberculosis.**—Tuberculosis was the cause of 112 deaths during the year—that is 8.7% of all deaths belonging to the borough. Of these deaths 85 were attributable to Tuberculosis of the lungs and 27 to other forms of Tuberculosis. The ages at which these deaths occurred are shown in Table 9.

**Table 9.**  
Causes of, and age at, death during 1923.

Causes of Death	Sex	Ages	All		At Ages						
			0-1	1-	2-	5-	15-	25-	45-	65-	75-
All Causes .....	M	729	143	36	26	29	35	91	181	127	61
	F	548	96	40	25	21	22	78	123	85	58
Enteric Fever .....	M	1	—	—	—	—	—	1	—	—	—
	F	—	—	—	—	—	—	—	—	—	—
Small-pox .....	M	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—
Measles .....	M	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—
Scarlet Fever .....	M	2	—	1	—	1	—	—	—	—	—
	F	2	—	—	1	1	—	—	—	—	—
Whooping Cough	M	5	1	2	2	—	—	—	—	—	—
	F	5	1	2	2	—	—	—	—	—	—
Diphtheria .....	M	2	—	—	1	1	—	—	—	—	—
	F	6	—	4	—	2	—	—	—	—	—
Influenza .....	M	16	1	1	—	—	—	3	8	2	1
	F	15	4	2	—	1	1	3	1	2	1
Encephalitis Lethargica .....	M	4	—	—	—	—	—	—	3	1	—
	F	3	—	2	—	—	—	1	—	—	—
Meningococcal Meningitis .....	M	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—
Tuberculosis of respiratory system	M	51	—	1	—	1	12	24	12	1	—
	F	34	—	—	—	2	7	20	4	1	—
Other Tuberculous diseases .....	M	16	5	5	1	2	2	1	—	—	—
	F	11	2	1	1	2	2	1	1	1	—
Cancer, Malignant disease .....	M	43	—	1	—	—	—	4	23	12	3
	F	48	—	—	—	—	—	10	20	12	6
Rheumatic fever .....	M	5	—	—	—	2	1	1	1	—	—
	F	4	—	—	—	1	1	2	—	—	—
Diabetes .....	M	9	—	—	—	—	—	2	4	3	—
	F	2	—	—	—	—	—	—	2	—	—
Cerebral Hæmorrhage, &c.	M	31	—	—	—	—	—	3	10	11	7
	F	30	—	—	—	—	—	3	13	10	4
Heart disease .....	M	71	—	—	—	2	3	9	31	19	7
	F	64	—	—	—	3	4	9	30	14	4
Arterio-sclerosis .....	M	29	—	—	—	—	—	1	10	15	3
	F	11	—	—	—	—	—	1	1	5	4
Bronchitis .....	M	52	7	1	1	—	—	2	12	20	9
	F	53	11	1	—	—	1	3	12	13	12
Pneumonia (all forms) .....	M	100	25	12	9	9	4	12	17	9	3
	F	54	12	15	11	3	1	3	7	1	1
Other respiratory diseases .....	M	10	4	1	—	—	—	2	3	—	—
	F	11	1	2	1	—	—	1	3	2	1
Ulcer of Stomach or duodenum	M	5	—	—	—	—	—	3	2	—	—
	F	3	—	—	—	—	—	3	—	—	—
Diarrhoea, &c. ....	M	11	7	1	1	1	—	—	—	—	1
	F	13	6	5	—	—	1	—	1	—	—
Appendicitis and typhlitis .....	M	5	—	—	—	—	—	1	2	2	—
	F	4	—	—	—	—	—	1	2	1	—
Cirrhosis of Liver .....	M	7	—	—	—	—	—	1	5	1	—
	F	1	—	—	—	—	—	—	1	—	—
Acute and chronic Nephritis .....	M	21	—	—	1	—	2	2	9	6	1
	F	14	—	—	—	—	1	—	4	7	2
Puerperal Sepsis .....	M	—	—	—	—	—	—	—	—	—	—
	F	1	—	—	—	—	—	1	—	—	—
Other Accidents and diseases of pregnancy and parturition .....	M	—	—	—	—	—	—	—	—	—	—
	F	2	—	—	—	—	—	2	—	—	—
Congenital debility and malformation	M	67	67	—	—	—	—	—	—	—	—
Premature birth .....	F	37	37	—	—	—	—	—	—	—	—
Suicide .....	M	6	—	—	—	—	—	3	3	—	—
	F	1	—	—	—	—	—	1	—	—	—
Other Deaths from violence	M	43	—	2	5	5	7	7	10	5	2
	F	9	—	—	3	—	—	1	1	—	4
Other defined disease .....	M	110	25	8	5	4	2	7	13	22	24
	F	106	22	4	6	5	2	11	20	17	19
Causes ill-defined or unknown .....	M	7	1	—	—	1	1	1	3	—	—
	F	4	—	2	—	1	—	—	1	—	—
		1277	239	76	51	50	57	169	304	212	119

**Other causes of death.**—The following extract from Table 9 shows some of the other principal causes of death :—

Pneumonia (all forms) .....	154
Bronchitis and other Respiratory Diseases .....	126
Heart Disease .....	135
Cerebral Hæmorrhage, &c. ....	61
Cancer and Malignant Disease .....	91
Suicide and other deaths from violence .....	59

**Infantile Mortality.**—During 1923 there were 239 deaths of children under one year of age. This corresponds to an infantile mortality rate of 91.3 per 1000 births. The infant death rate for 1922 was 115.5.

Of the 239 deaths under 1 year, 227 were legitimate children and 12 illegitimate children, giving a legitimate infant mortality of 89.4 per 1000 legitimate births and an illegitimate infant mortality of 157.8 per 1000 illegitimate births.

The principal causes of death in all cases was as follows :—

Congenital debility and malformation and premature birth.....	104
Pneumonia .....	37
Bronchitis and other respiratory diseases .....	23
Diarrhœa, &c. .....	13
Whooping Cough.....	2
Tuberculosis .....	7
Other Diseases .....	53

The following statement reviews the infant death rates under the principal causes in the years 1921, 1922 and 1923.

	Infantile Mortality per 1,000 births.		
	1921	1922	1923
Congenital debility, malformations and premature births.....	39.88	44.43	39.77
Pneumonia, bronchitis and other respiratory diseases .....	26.80	35.19	22.94
Measles and Whooping Cough...	2.61	4.62	1.76
Diarrhœa, etc. .....	12.09	7.82	4.97
Other Diseases .....	22.23	23.46	22.94

The ages at which these deaths occurred is shown in the following table :—

	Expressed as % of total Infantile deaths.		
	1921	1922	1923
Deaths under 1 day old.....	15.50	19.25	14.65
Deaths 1 to 7 days old.....	9.49	10.86	13.80
Deaths 1 to 4 weeks old.....	13.29	13.04	14.65
Deaths 4 weeks to 3 months old	18.68	18.64	11.29
Deaths 3 to 6 months old.....	18.03	13.97	19.67
Deaths 6 to 12 months old ...	25.00	24.23	25.94

Examination of these tables shows that there has been a considerable saving in deaths due to the allied conditions of Measles, Whooping Cough and Respiratory Diseases, and in deaths due to diarrhoea. The mortality due to congenital defects still remains high however and, considered in conjunction with the persistently high percentage of deaths that occur in infants under 1 week old, point to the need of increased antenatal supervision.

Table 10 shows the infant death rate for St. Helens since 1873 and the figures for England and Wales for the same period.

### III.—INFECTIOUS DISEASES.

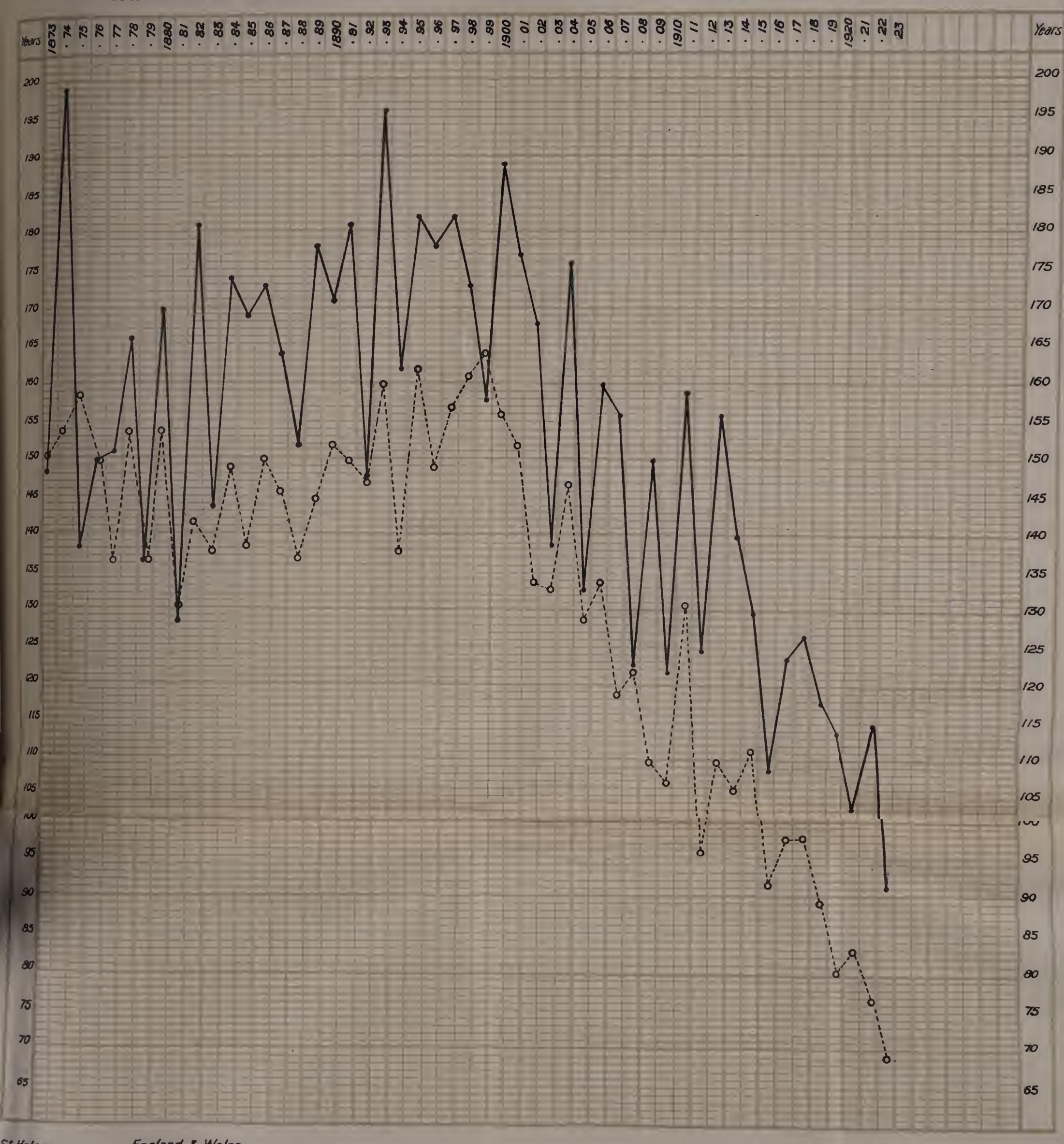
The following are the infectious diseases compulsorily notifiable to the Medical Officer of Health in St. Helens :—

Small Pox	Puerperal Fever
Scarlet Fever	Cerebro Spinal Fever
Diphtheria and Membranous	Acute Poliomyelitis
Croup	Acute Polio Encephalitis
Enteric Fever	Acute Encephalitis Lethargica
Typhus Fever	Ophthalmia Neonatorum
Relapsing Fever	Erysipelas
Continued Fever	Malaria
Trench Fever	†Measles and German Measles
Dysentery	†Whooping Cough
*Pneumonia	Tuberculosis (Pulmonary and other forms).
Cholera	
Plague	

\*Acute Primary Pneumonia and Acute Influenzal Pneumonia.

†Notification by medical practitioner is not required if the disease "has

Table 10.  
INFANTILE MORTALITY RATE, S<sup>T</sup> HELENS AND ENGLAND AND WALES 1873-1923.





occurred in the same family or institution and been notified within the period of two months immediately preceding the date on which he first becomes aware of a further case."

Table 11 shows the total number of cases notified during the year, the total number of deaths which occurred, and the numbers admitted to the Corporation Hospitals.

Table 11.

Infectious Diseases, 1923.—Total number of cases notified, number of cases admitted to hospital and the total deaths.

DISEASE.	Notifi-cations received.	Cases admitted to hospital.	Total Deaths.
Small-pox .....	—	—	—
Diphtheria .....	105	91	8
Scarlet Fever .....	258	253	4
Enteric Fever .....	2	2	1
Puerperal Fever .....	4	3	1
Erysipelas .....	53	7	1
Pneumonia .....	190	9	154
Ophthalmia Neonatorum ..	30	9	—
Polio-Myelitis .....	1	—	—
Encephalitis Lethargica.....	9	6	7
Cerebro Spinal Fever .....	1	1	1
Dysentery .....	6*	—	—
Measles .....	74	1	—
Whooping Cough .....	895	5	10
Tuberculosis :—			
Pulmonary .....	141	{ 196	85
Non-Pulmonary .....	48		27

\*All notified from Rainhill Asylum.

Table 12 gives the age distribution of the cases notified, and table 9 the age distribution of the deaths which occurred. The number of cases notified during each week of the year are shown in Table 13, and the number of notifications each year since 1912 are seen in Table 14.

Table 12.

Age distribution of cases of Infection Disease notified during 1923.

DISEASE.	Notifications received.	Under 1											
		1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	
Scarlet Fever	258	1	12	14	28	21	121	47	4	9	1	—	
Diphtheria	105	1	8	6	7	12	20	20	10	14	7	—	
Pneumonia	190	8	15	14	10	12	33	16	13	31	10	23	
Erysipelas	53	1	1	1	1	—	2	5	3	7	9	19	
Puerperal Fever	4	—	—	—	—	—	—	—	—	2	2	—	
Ophthalmia	30	30	—	—	—	—	—	—	—	—	—	—	
Neonatorum													
Enteric Fever	2	—	—	—	—	—	—	—	—	—	2	—	
Polio-myelitis	1	—	1	—	—	—	—	—	—	—	—	—	
Encephalitis	9	—	2	—	—	—	—	2	—	2	2	1	
Lethargica													
Cerebro Spinal													
Fever	1	—	—	—	—	—	—	1	—	—	—	—	
Dysentery	6	—	—	—	—	—	—	—	—	3	—	2	
Whooping Cough	895	99	127	133	168	111	245	10	2	—	—	—	
Measles	74	14	9	6	18	7	16	2	1	1	—	—	
Tuberculosis :—													
(a) Pulmonary													
M	80	—	—	1	—	—	6	6	7	30	14	15	
F	61	—	—	1	—	—	4	7	7	27	9	6	
(b) Non-pulmonary													
M	25	1	2	—	3	—	6	5	—	4	3	—	
F	23	1	1	1	—	1	6	6	1	4	2	—	

Table 13.

Infectious Diseases.—Number of cases of Infectious Disease notified each week in 1923.

Week ending		Scarlet Fever.	Diphtheria.	Pneumonia.	Erysipelas.	Peurperal Fever.	Ophthalmia Neonatorium.	Enteric Fever.	Polio-myelitis.	Encephalitis Lethargica	Cerebro Spinal Fever	Measles.	Whooping Cough.	Dysentery.
Jan. 6		11	5	4	2	1	1	1	1	1	1	2	13	1
13		8	6	5	1	2	1	1	1	1	1	3	13	8
20		9	6	6	1	3	2	1	1	1	1	10	7	2
27		9	5	8	2	1	1	1	1	1	1	1	3	1
Feb. 3		9	3	10	9	3	2	1	1	1	1	1	10	1
10		6	1	10	6	2	1	1	1	1	1	1	7	1
17		6	6	11	6	1	1	1	1	1	1	1	10	1
24		6	2	13	13	1	1	1	1	1	1	1	7	1
Mar. 3		4	1	2	2	1	1	1	1	1	1	1	2	1
10		7	1	2	5	1	1	1	1	1	1	1	11	1
17		10	1	1	1	1	1	1	1	1	1	1	10	1
24		7	1	1	1	1	1	1	1	1	1	1	10	1
31		4	4	1	1	1	1	1	1	1	1	1	4	1
Apl. 7		4	4	4	4	1	2	2	2	2	2	2	13	1
14		2	3	3	3	1	1	1	1	1	1	1	9	1
21		3	3	3	3	1	1	1	1	1	1	1	8	1
28		3	5	3	3	1	1	1	1	1	1	1	21	1
May 5		4	4	8	8	1	1	1	1	1	1	1	13	1
12		4	4	10	4	1	1	1	1	1	1	1	13	1
19		1	1	4	4	1	1	1	1	1	1	1	18	1
26		1	5	8	8	1	1	1	1	1	1	1	19	1
June 2		6	5	2	2	3	1	1	1	1	1	1	36	1
9		4	4	4	4	1	1	1	1	1	1	1	44	1
16		3	2	1	1	1	1	1	1	1	1	1	33	1
23		3	2	1	1	1	1	1	1	1	1	1	41	1
30		4	3	2	2	1	1	1	1	1	1	1	23	1
July 7		2	3	4	4	1	1	1	1	1	1	1	45	1
14		4	1	4	4	2	1	1	1	1	1	1	54	1
21		3	2	2	2	2	1	1	1	1	1	1	44	1
28		3	1	4	4	1	1	1	1	1	1	1	23	1
Aug. 4		2	3	1	1	1	1	1	2	1	1	1	20	1
11		3	1	1	1	1	1	2	2	1	1	1	13	1
18		4	1	1	1	1	1	2	1	1	1	1	23	1
25		3	1	1	2	1	1	3	1	1	1	1	35	1
Sept. 1		3	1	1	1	1	2	2	1	1	1	2	24	1
8		4	1	1	1	1	1	2	1	1	1	1	16	1
15		2	1	2	2	1	1	3	1	1	1	1	21	1
22		4	1	2	2	1	1	2	1	1	1	1	22	1
29		7	1	1	1	1	1	1	1	1	1	1	11	1
Oct. 6		7	2	2	5	1	1	2	1	1	1	1	19	1
13		8	4	4	1	2	1	2	1	1	1	1	14	1
20		4	1	4	2	2	1	1	1	1	1	1	5	1
27		6	2	2	2	2	1	1	1	1	1	1	11	1
Nov. 3		7	4	1	2	2	1	1	1	1	1	1	13	1
10		10	2	2	2	2	1	1	1	1	1	1	11	1
17		10	3	1	1	1	1	1	1	1	1	1	11	1
24		2	3	4	4	2	1	1	1	1	1	1	8	1
Dec. 1		4	1	1	1	1	1	2	1	1	1	1	11	1
8		4	1	1	8	1	1	2	1	1	1	1	13	1
15		1	1	9	1	1	1	1	1	1	1	1	14	1
22		3	6	6	1	1	1	1	1	1	1	1	10	1
29		4	3	6	6	1	1	1	1	1	1	1	16	2
		258	105	190	53	4	30	2	1	9	1	74	895	6

Table 14.

Notifications of Infectious Disease received during the undermentioned years.

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Diphtheria	148	120	289	536	538	756	237	128	51	88	105
Scarlet Fever	723	335	501	736	589	568	221	474	232	190	258
Enteric Fever	25	27	27	11	8	7	7	13	2	3	2
Peurperal Fever	4	17	10	10	5	8	17	18	10	4	4
*Pneumonia	—	—	—	—	—	—	322	148	77	233	190
Erysipelas	75	109	74	74	84	96	72	53	79	42	53
Ophthalmia Neonatorum	7	74	1	61	48	40	76	63	42	48	30
Poliomyelitis	—	—	—	—	4	2	1	1	1	1	1
Continued Fever	—	—	—	—	—	—	—	4	—	—	9
§Encephalitis Lethargica	—	—	—	—	—	—	—	—	2	—	—
§Polio-Encephalitis	—	—	—	—	—	—	—	—	17	21	6
*Dysentery	—	—	—	—	—	—	—	—	2	2	42
*Malaria	—	—	—	—	—	—	—	54	158	22	—
*Measles	1999	454	2106	474	196	4628	1106	913	2960	196	3437
*Whooping Cough	123	207	—	—	128	631	814	206	287	576	74
*Cerebro-Spinal Fever	—	—	—	—	2	1	—	3	—	388	395
Small Pox	—	—	—	—	—	—	—	—	—	—	—

\*Only notifiable since 1st March, 1919.

†Compulsorily notifiable since 1st August, 1915, previous to which date information was only received through the schools.

§Compulsorily notifiable since 1st January, 1919.

**SMALL-POX.**—No case of small-pox was notified during the year.

The extent of vaccination in St. Helens since 1897 is shown in Table 15.

Table 15.

Vaccination returns since 1897.

YEAR.	2 Vaccin- ated.	3 Insus- ceptible.	4 Dead.	5 Con- Obj'e't'r	6 Post- poned.	7 Removed	8 Un- accounted	Percentage not Vaccinated including Columns 5, 6, 7, 8
*1897	2,680	11	390	4	7	110	7	4·9
*1898	2,696	15	383	14	1	103	15	4·6
*1899	2,625	32	346	10	3	94	16	4·8
*1900	2,654	10	367	5	12	82	18	4·2
1901	2,639	4	391	11	29	59	24	4·4
1902	2,788	4	342	7	12	58	34	3·8
1903	2,977	8	325	2	6	62	11	2·6
1904	2,940	7	341	10	10	42	25	2·8
1905	2,923	3	270	6	10	29	18	2·1
1906	2,733	5	318	8	12	39	22	2·8
1907	2,810	9	257	24	19	49	17	3·7
1908	2,858	18	248	70	11	35	20	4·5
1909	2,720	8	241	81	9	33	11	4·7
1910	2,731	3	255	131	3	23	19	6·0
1911	2,750	9	277	148	5	26	14	6·5
1912	2,646	4	249	216	12	23	4	8·7
1913	2,499	6	296	339	14	27	9	13·0
1914	2,654	11	281	348	6	22	24	13·0
1915	2,352	2	189	367	9	34	15	15·3
1916	2,056	4	186	287	3	39	24	14·6
1917	1,702	4	158	267	1	6	45	15·7
1918	1,861	0	201	281	8	40	19	14·5
1919	1,999	2	189	385	4	25	18	17·8
1920	2,452	1	223	553	12	18	23	19·8
1921	2,234	2	179	530	6	29	17	20·6
1922	2,143	7	185	411	5	27	23	17·8†

\*The above Returns are for St. Helens Sub-District of the Prescot Union, which does not include quite the whole of the Borough.

†Of the 17·8 per cent unvaccinated 15·7 are conscientious objectors.

**SCARLET FEVER.**—258 cases occurred during the year with four deaths. The cases were more or less evenly distributed throughout the year with some increase during the winter months. The number of cases during the previous year was 190.

**DIPHTHERIA.**—105 cases were notified and eight deaths occurred during the year. Diphtheria Antitoxin for the injection of patients at home is available for medical practitioners at the office of the Medical Officer of Health and at the Borough Isolation Hospital.

**ENTERIC FEVER.**—Two cases were notified during the year, and one death was stated to be due to the disease. In the fatal case the diagnosis was not supported by bacteriological examination. The non fatal case was definitely Enteric Fever but despite every effort made the source of infection could not be discovered.

**MEASLES.**—Only 74 cases were notified during the year and no deaths occurred. A pavillion at the Isolation Hospital is set aside for serious cases and home nursing can be provided by utilising the services of nurses at the school clinic.

**WHOOPING COUGH.**—895 cases were notified with 10 deaths. During the previous year there were 576 cases notified.

**PUERPERAL FEVER.**—4 cases were notified during the year and one death occurred.

**OPHTHALMIA NEONATORUM.**—30 cases were notified during the year. Of these 20 were treated at home, and 10 were admitted to Peasley Cross Isolation Hospital. As the result of an enquiry at the end of the year it was found that one case had become totally blind, and in one case there resulted loss of vision of one eye. In the remainder no impairment of vision was apparent.

**CEREBRO—SPINAL MENINGITIS.**—One case was notified during the year and proved fatal.

**ENCEPHALITIS LETHARGICA.**—Nine cases were notified during the year and seven deaths were attributed to this cause. Of the cases notified only five proved to be true Encephalitis Lethargica, the others being (a) Cerebral tumour 1, (b) Meningitis

following pneumonia 2, and (c) Meningitis following whooping cough 1. Of the seven deaths attributed to Encephalitis Lethargica, two occurred in unnotified cases, and in three instances there is reason to doubt the accuracy of the diagnosis. Accepting as correct the two deaths in unnotified cases the true position would appear to that 7 cases occurred with 4 deaths.

**BOROUGH ISOLATION HOSPITAL.**—This hospital is situated at Peasley Cross and has accommodation for about 100 patients. There is no resident medical officer. Cases are also admitted to this hospital from the Urban District of Haydock. At the beginning of the year there were 48 patients in hospital. New cases admitted during the year numbered 538 making a total number of 586 patients dealt with. At the end of the year there were 38 patients remaining. The highest number of patients under treatment at any one time was 78 and the lowest 23.

The details of the admission and discharges are shown in Table 16.

**Table 16.**

Peasley Cross Isolation Hospital  
Record of cases treated during 1923.

DISEASE.	In hospital Jan. 1st, 1923.	Ad- mitted.	Dis- charged.	Died.	In hospital Jan. 1st, 1924.
Typhoid Fever.....	—	3	3	—	—
Scarlet Fever .....	37	277	282	6	26
Diphtheria .....	3	66	57	7	5
Puerperal Fever .....	1	4	5	—	—
Venereal Disease .....	1	4	5	—	—
Other Diseases .....	5	178	164	12	7
Mothers with sick babies	—	3	3	—	—
Babies with sick mothers	1	3	4	—	—
 Total .....	48	538	523	25	38

**AMBULANCE PROVISION.**—Two motor ambulances are kept at the Isolation Hospital to convey patients to either of the Corporation hospitals. During the year the total distance travelled was 13,176 miles.

**DISINFECTION.**—Disinfection of premises by means of the formalin spray is carried out by the Disinfectors from the Medical Officer's Department, and bedding and articles of clothing etc. are disinfected by steam or other appropriate method at the Borough Isolation Hospital. During the year the disinfectors dealt with 1868 premises and the number of articles disinfected at the Isolation Hospital was as follows :—

		Articles
Hospital Clothing and Bedding	...	2511
Blankets, Sheets and Rugs	...	4530
Pillows and Cushions	...	1976
Mattresses, etc.	...	610
Other Articles of Clothing	...	798
Library Books	...	115
Other Articles	...	356

#### IV.—TUBERCULOSIS.

The arrangements for dealing with Tuberculosis in St. Helens include :—

- 1.—Notification by general practitioners, school medical inspectors, medical officers of institutions, etc., in accordance with Public Health (Tuberculosis) Regulations, 1912.
- 2.—Visitation by health visitors of all cases notified.
- 3.—Provision of a Tuberculosis Dispensary where consultations are carried out and treatment supplied when necessary.
- 4.—Provision of sanatorium treatment at Eccleston Hall Sanatorium (70 beds).
- 5.—Reservation of four beds at the Liverpool Sanatorium, Dela-mere, for special cases.
- 6.—Disinfection of premises, bedding, etc., as and when required.

7.—Under St. Helens Corporation Act, 1911, power is given for the compulsory removal to suitable hospital of cases in a highly infectious state where home conditions are such that proper precautions cannot be, or are not being, taken to prevent the spread of infection.

8.—Provision of extra nourishment in suitable cases.

**NOTIFICATION.**—During the year 141 new cases of pulmonary tuberculosis were notified and 85 deaths occurred from this form.

During the same period 48 new cases of other forms of tuberculosis were notified and 27 deaths occurred.

Table 17 shows the age and sex distribution of all cases notified during 1923.

Of the 141 new cases of pulmonary tuberculosis notified during 1923, 44 died during the year, and the average duration of life after notification in these cases was only 78·7 days. In 3 cases death occurred within one week of notification. Furthermore, of the 85 deaths from pulmonary tuberculosis registered during 1923, 14 were not previously notified as suffering from the disease.

These figures point to a very serious obstacle in the campaign against Tuberculosis, namely, late notification of the disease. For this, public opinion is very considerably to blame. The patient's relatives frequently withhold from the patient for as long as they can, the true cause of the illness, and unfortunately the medical practitioner too often helps them in this deception. This is false kindness to the patient, and it is criminal folly towards those with whom the patient has to work or live. There is no doubt that Tuberculosis is curable, but early recognition and treatment is

Table 17.  
Public Health (Tuberculosis) Regulations, 1912.

Summary of Notifications during the period from the 31st December, 1922, to the 29th December, 1923.  
in the County Borough of St. Helens, Lancs.

Age Periods	NOTIFICATIONS ON FORM A.										NOTIFICATIONS ON FORM B.					Number of Notifications on Form C.			
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 and up	65 and up	Total Primary Notifications	Total Notifications on Form A.	Total Notifications on Form B.	Poor Law Institutions	Institutions on Form C.	Sanatoria.
Pulmonary Males ...	—	1	5	7	8	22	14	13	2	1	78	81	—	1	1	2	2	—	110
,, Females	—	1	3	5	7	8	19	9	5	1	—	58	63	—	2	2	3	—	71
Non-Pulmonary Males	1	5	4	5	—	2	2	3	—	—	1	23	25	—	2	2	2	—	3
,, Females	1	3	4	6	1	—	4	2	—	—	—	21	24	—	2	2	3	—	2

more essential than in most other diseases. Patients should be encouraged to recognise this fact so that they may undergo suitable treatment early, not only for their own sake but that they may take the necessary precautions to prevent the spread of infection to other members of the community. Early notification therefore, offering as it does Sanatorium Treatment when such can do most good and permitting early precautions to check the spread of infection to others, is essential in combating Tuberculosis.

Another point closely connected with early notification is the examination of contacts. This is of the greatest importance in pulmonary Tuberculosis. It sometimes happens that whilst one member of a family is a known case of the disease another apparently healthy member is also affected—frequently in the very early stages. Examination of contacts brings to light these cases and enables treatment to commence without loss of time. Further a known case is always liable to become a source of infection in the home so that contacts may at any time contract the disease. Examination and supervision of contacts is therefore an important step in the fight against Tuberculosis. Unfortunately in St. Helens despite repeated requests the number of contacts who present themselves for examination at the Dispensary is extremely small, and, at the time of the medical staff is fully occupied with other duties and home visitation is therefore impossible, the bulk of our knowledge of contacts—especially as regards adults—is only that which can be obtained by the health visitor when visiting the notified case. Children contacts are supervised through the School Medical Department but more should be done for the adult contact.

Table 18 shows the number of new cases notified and the deaths which have occurred each year during the past 10 years.

At the end of 1923 there remained on the Tuberculosis Register in St. Helens 623 cases of pulmonary and 304 cases of non-pulmonary tuberculosis.

Table 18.

Tuberculosis.—Number of new cases notified and number of deaths each year. 1912 to 1923.

Year.		Pulmonary.	Other forms.
1912	Cases notified .....	130	—
	Deaths .....	91	65
1913	Cases notified .....	253	164
	Deaths .....	100	90
1914	Cases notified .....	207	116
	Deaths .....	113	65
1915	Cases notified .....	203	126
	Deaths .....	99	56
1916	Cases notified .....	189	137
	Deaths .....	127	41
1917	Cases notified .....	198	62
	Deaths .....	121	42
1918	Cases notified .....	144	40
	Deaths .....	107	34
1919	Cases notified .....	150	56
	Deaths .....	99	31
1920	Cases notified .....	221	65
	Deaths .....	82	37
1921	Cases notified .....	179	63
	Deaths .....	102	32
1922	Cases notified .....	167	58
	Deaths .....	78	39
1923	Cases notified .....	141	45
	Deaths .....	85	27

**SURGICAL TUBERCULOSIS.**—At the end of 1923 a complete review of all known cases of non-pulmonary tuberculosis in St. Helens was carried out and the results of this survey are given in Table 18a.

**Table 18a.**

Survey of cases of non-Pulmonary Tuberculosis in St. Helens at 31st December, 1923.

TYPES OF CASES	Aged 0-15			Aged 15 and over			All Ages Grand Total
	Active Cases	Quiescent or Arrested Cases	Total	Active Cases	Quiescent or Arrested Cases	Total	
		In Residential Institutions	Not in Institutions		In Residential Institutions	Not in Institutions	
<b>1. Bones and Joints</b>							
A Spines .....	2	4	—	8	2	12	—
B Hips .....	4	1	—	5	4	6	—
C Knees .....	—	—	—	4	—	4	—
D Ankles .....	—	—	—	5	—	5	—
E Elbows and Wrists .....	1	1	—	6	1	7	—
F Other Sites .....	2	4	—	5	2	9	—
<b>2. Abdomen</b> .....	1	6	—	26	1	32	—
(Mesentery, peritoneum and intestines) .							
<b>3. Peripheral Glands</b> .....	—	20	—	26	—	46	—
<b>4. Skin</b> .....	1	6	—	3	1	9	—
<b>5. Genito-urinary tract</b> .....	—	—	—	—	—	1	—
<b>6. Other Parts and Organs</b> .....	3	3	—	6	3	9	—
<b>Totals</b> .....	14	45	—	94	14	139	—
				1	45	—	105
					1	150	304

Examination of this table shows that in 104 out of the 304 cases on the Register the disease was in an active stage, i.e., that treatment was required. The kind of treatment for this form of Tuberculosis varies but taken generally it may be stated that

with the exception of cases in which the peripheral glands or skin only are affected, prolonged residential treatment in a properly equipped institution is necessary. Deducting therefore the number of cases of active tuberculosis in peripheral glands (31) and skin (22) from the total of active cases, it is seen that at the end of 1923, of 53 cases which required treatment in a residential institution only 14 were receiving such treatment.

For St. Helens special residential treatment for surgical tuberculosis is mainly supplied from the following sources :—

- (a) Eccleston Hall Sanatorium—cases of glandular and abdominal tuberculosis and early bone and joint affections are admitted as occasion permits and according to the circumstances of each case. It must be remembered however that this institution is primarily for pulmonary tuberculosis and non-pulmonary cases cannot be admitted at the expense of pulmonary, and further that as the institution is not equipped to deal with surgical cases, only selected cases can be admitted.
- (b) The Education Committee reserve four beds at Leasowe Hospital. These are awlays kept occupied by children of school age.
- (c) The Health Committee pay for approved cases treated at the Heswall Branch of the Royal Liverpool Children's Hospital. This is limited to cases which have passed through the Children's Hospital, Liverpool.
- (d) The St. Helens Invalid and Cripple Children's Aid Society maintain cases at various approved institutions according as their finances allow.
- (e) Surgical Treatment is available at the Pilkington Special Hospital (which has been approved by the Ministry of Health for the purpose) but at present the Corporation only use this for cases requiring active surgical interference. By arrangements with the Authorities of this Hospital cases are frequently transferred to Eccleston Hall Sanatorium for the prolonged convalescence and fresh air treatment after the need for active surgical treatment has passed.

It would appear therefore that the time has now come when the Corporation should have a definite scheme for dealing with Surgical Tuberculosis. It will be remembered that in 1920 negotiations were in progress for the treatment of these cases at Leasowe in conjunction with neighbouring authorities but these had to be abandoned owing to financial difficulties. For efficient treatment a specially equipped institution is required and, though the numbers would be greater in the first few years, it is estimated that for St. Helens approximately 20 beds are required annually.

#### **HEALTH VISITING OF TUBERCULAR PATIENTS.—**

Every case notified is visited by one of the health visitors who advises regarding the means to be taken to prevent the spread of infection and reports to the medical officer cases requiring isolation or sanatorium treatment. Further visits are paid to the cases at intervals during the year. The health visitor also arranges for the disinfection of premises, bedding, etc., as required.

During the year health visitors paid 3555 visits to cases of tuberculosis in the borough, and in 350 instances disinfection of premises and bedding was carried out.

**TUBERCULOSIS DISPENSARY.—**During 1923, 424 persons attended the Tuberculosis Dispensary and made a total of 2500 attendances. Of this number 136 were cases visiting the dispensary for the first time, and of these 87 or 61.7% were found to be suffering from tuberculosis in one or other form. The remaining 49 cases were examined as contacts or as doubtful cases. Of the total number of cases attending 109 were referred by the Ministry of Pensions, 102 being old cases attending for treatment and 7 new cases referred for report or treatment, or both.

The average weekly attendance at the dispensary was 48.

The classification of the new cases attending the dispensary is shown in Table 19, and Table 20 shows number of attendances of old and new cases.

**Table 19.**

Age and sex classification of new cases of tuberculosis attending the dispensary.

	Pulmonary.		Other Forms.		Suspicious cases.		Totals.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1—5....	—	—	2	2	2	5	4	7
5—15....	10	7	4	8	2	9	16	24
15—25....	5	8	1	1	4	5	10	14
25—35....	8	9	—	4	6	4	14	17
35—45....	7	4	—	—	7	2	14	6
45—55....	3	3	—	—	2	—	5	3
55—65....	1	—	—	—	—	—	1	—
65 upwards	—	—	—	—	1	—	1	—
Totals ....	34	31	7	15	24	25	65	71

**Table 20.**

Number of attendances at the tuberculosis dispensary during 1923.

	Pulmonary.	Other forms.	Suspicious cases.
Number of old cases attending on 31st Dec., 1922	197	61	30
Number of new cases during the year 1923 .....	65	22	49
Number of attendances during the year .....	1590	621	289

**INSTITUTIONAL TREATMENT.**—At the Corporation Sanatorium, Eccleston Hall, 37 male and 33 female beds are provided and kept fully occupied. The Council also reserved four beds at the Westmorland Sanatorium, Meathop, for special cases, but transferred this to the Liverpool Sanatorium, Delamere, at the beginning of 1924.

The number of St. Helens patients who received institutional treatment during the year was as follows :—

At Eccleston Hall Sanatorium.....	174
At The Westmorland Sanatorium.....	13
At Delamere Training Colony .....	2
,,    ,,    Sanatorium .....	1
At Burrow Hill Colony, Frimley .....	5
At Knutsford Training Colony .....	1
	—
Total ...	196
	—

**Table 21.**  
The admissions and discharges at Eccleston Hall Sanatorium.

		Remaining in on Dec. 31st, 1922.		Admitted during 1923.		Discharged during 1923.		Died during 1923.		Left without permission.		Dismissed for unsatisfactory behaviour.		Remaining in on Dec. 31st, 1923.	
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
<b>A</b> (Early cases)	1	2	1C	14	8	12	1C	7	6C	2	1C	1	—	—	3 1C
<b>B.</b> (Intermediate cases).	17	10	3C	26	4C	14	2C	11	4C	3	1C	6	4C	2	18 —
<b>C.</b> (Late cases)	2	1	4C	33	8C	21	10C	8	4C	13	1C	1	—	—	6C 2C
<b>D.</b> (Observation cases).	15	3	2C	4	—	6	1C	13	—	—	—	2C	—	—	5 2C
<b>E.</b>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>TOTALS</b>	35	16	10C	77	15C	46	24C	47	7C	16	2C	11	3C	6	5 —
														34 3C	19 11C

c—Patients sent by Lancashire County Council.

Table 21 shows the admissions and discharges at Eccleston Hall Sanatorium during the year. The average duration of stay was 110 days. This figure is remarkably low for a Sanatorium and the reason appears to be twofold :—

(a) the late notification of cases of tuberculosis already referred to means that many of the cases admitted to Eccleston Hall are beyond the stage where prolonged stay will ultimately arrest the disease. "Patching" is the most that can be effected and for this purpose a much shorter stay is all that is required. Further, owing to the present housing conditions, it is becoming increasingly necessary to admit advanced and infective cases so as to limit as far as possible the spread of the disease to others.

(b) owing to the nearness of the institution to the town the patient is too much in contact with his previous surroundings. His interests therefore are not in the institution, and, as soon as he feels at all fit, he becomes restless and is insistent on taking his discharge.

That these obstacles can be overcome time alone will show. The tubercular patient is notoriously difficult to handle, and only when by education he realises that the commencement of the disease is the time for treatment and that treatment must be prolonged if it is to be effective, then will the percentage of Sanatorium cures be higher than it is to-day.

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## V.—VENEREAL DISEASES.

Treatment is carried out by the staff of the Medical Officer's Department, female cases being dealt with by the female Assistant Medical Officer.

Accommodation for 6 male and 6 female patients is provided at the Borough Isolation Hospital for persons requiring inpatient treatment.

During the year 195 male and 59 female patients made a total of 1615 attendances at the Treatment Centre and 3 patients received in-patient treatment at the Isolation Hospital.

Bacteriological examinations are carried out at the Liverpool University.

A return relating to all persons who were treated in St. Helens during the year is given in Table 22.

### Table 22—Venereal Disease.

Annual return relating to persons residing in the County Borough of St. Helens who were treated at the Treatment Centre at Claughton Street during the year ending on the 31st December, 1923.

1	Number of persons dealt with at or in connection with the out-patient Clinic for the first time and found to be :—		
		Males	Females
	Suffering from syphilis .....	18	11
	, " soft chancre .....	—	—
	, " gonorrhœa .....	34	2
	Not suffering from venereal disease .....	27	10
	TOTAL ..	79	23
2	Number of persons discharged from the out-patient Clinic after completion of treatment for :—		
	Syphilis .....	20	8
	Soft chancre .....	—	—
	Gonorrhœa .....	16	—
	TOTAL ..	36	8
3	Number of persons who ceased to attend the out-patient Clinic without completing treatment and who were suffering from :—		
	Syphilis .....	27	12
	Soft chancre .....	—	—
	Gonorrhœa .....	42	4
	TOTAL ..	69	16
4	Total attendances of all persons at the out-patient Clinic who were :—		
	Suffering from syphilis .....	584	246
	, " soft chancre .....	—	—
	, " gonorrhœa .....	607	24
	Not found to be suffering from venereal disease .....	105	49
	TOTAL ..	1296	319
5	Aggregate number of " In-patient days " of treatment given to persons suffering from venereal disease .....	24	8

#### IN-PATIENTS

7	Number of doses of Salvarsan substitutes given :—		
		Doses.	
	to (1) St. Helens patients .....	3	
	(2) Lancashire County patients .....	—	
	(3) Others .....	—	
	OUT-PATIENTS		
	to (1) St. Helens patients .....	381	
	(2) Lancashire County patients .....	42	
	(3) Others .....	—	

8.	Examinations of Pathological material :—		
		(a)	
	Specimens from persons attending at the Treatment Centre which were examined at this Centre :—		
	For detection of spirochetes .....		
	" " " gonococci .....		
	" " " Wassermann reaction .....		
	Others .....		
	(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an independent laboratory :—		
	For detection of spirochetes .....		
	" " " gonococci .....	75	
	" " " Wassermann reaction .....	197	
	Others .....	—	

**VI.—SUMMARY (for reference) of Nursing Arrangements,  
Hospitals, and other Institutions available  
for the district.**

**HOME NURSING.**—The St. Helens and District Nursing Association, supported by voluntary contributions, maintain a superintendent and eight nurses to attend non-infectious cases in their own homes. 1408 new cases and 123 old cases were nursed during the year, the total number of visits amounting to 38,896.

For infectious diseases e.g. Measles and Whooping Cough, the services of one or more trained nurses from the staff of the Medical Officer's Department are available.

**MIDWIVES.**—No district midwives are employed or subsidised by the public health authority. In exceptional cases however, where the parent has been unable to do so by reason of poverty, the Council have paid the midwife's fee.

**CLINICS AND TREATMENT CENTRES.**—The following clinics and treatment centres are provided by the Corporation :

**(1).—Maternity and Child Welfare Centres**—combined clinics for expectant and nursing mothers and for children under 5 years of age.

- (a) Town Hall Clinic ... Open Monday, Wednesday and Thursday, 2 to 4 p.m. For Hardshaw, Thatto Heath, Derbyshire Hill and Parr Districts.
- (b) Albion Street Clinic ... Open Monday, Tuesday and Wednesday, 2 to 4 p.m. For North & South Eccleston, North and South Windle, and Central Districts.
- (c) Elizabeth Street Clinic ... Open Thursday, 2 to 4 p.m. For Peasley Cross and Sutton Districts.
- (d) Marshalls Cross Clinic ... Open Tuesday, 2 to 4 p.m. For Marshalls Cross, Sutton Manor and Clock Face Districts.
- (e) The Dispensary, Claughton Street ... For Ante-natal cases only. Friday 2 to 4 p.m.

(2).—**School Clinic, Claughton Street.**—For treatment of minor ailments, throat and nose defects, eyes, dental defects and the X-ray treatment of ringworm. Minor ailments are treated daily 9 a.m. to 5 p.m. Other defects on special days. A scale of income has been drawn up for recovery of cost of treatment in non-necessitous cases.

(3).—**Tuberculosis Dispensary, Claughton Street.**—Open Monday and Friday from 10 to 11-30 a.m., and on Wednesday evening from 5-30 to 7 p.m.

(4).—**Venereal Diseases Centre, Claughton Street.**—Open for males on Monday, 6 to 7 p.m., and for females, Wednesday, 7 to 8 p.m. The centre is also open daily from 9 a.m. to 5 p.m., for irrigation, advice and prophylactic treatment.

### **HOSPITALS—Provided by the Council :—**

(1).—Borough Isolation Hospital, Peasley Cross. For Infectious Diseases (other than Small-pox). Beds, 100.

(2).—Eccleston Hall Sanatorium for cases of Tuberculosis. Beds, 70

(3).—Old Whint Hospital, Haydock. For maternity cases and pre- and post-natal complications. Also for debilitated and ailing infants.

**Subsidised by the Council.**—Sankey Small-pox Hospital, for cases of Small-pox. St. Helens pays an annual retaining fee to the Warrington Corporation and the costs of treatment of any patient admitted from St. Helens.

**Other Hospitals.**—*The St. Helens Hospital.*—Supported partly by subscribers and partly by contributions. For all medical and surgical non-infectious cases. Accommodation about 115 beds. Out-patient department for Ophthalmic and Gynaecological cases.

*The Providence Free Hospital.*—Accommodation for about 100 patients (general medical and surgical cases).

*The Pilkington Special Hospital.*—For the past four years the facilities of this hospital have been available for civilian patients, men, women and children, there being a scale of charges for out-patients, in-patients, and for private wards. The hospital is chiefly concerned with injuries and diseases of bones, joints, nerves, tendons, etc. A free clinic is held for the more necessitous crippled children of the district.

## VII.—MATERNITY AND CHILD WELFARE.

The various activities under the Maternity and Child Welfare Schemes of the Council comprise the following :—

- 1.—Notification of Births under the Notification of Births Acts, 1907 and 1915.
- 2.—Inspection and Supervision of Midwives.
- 3.—Health Visiting.
- 4.—Provision of Ante-natal and Maternity and Child Welfare Clinics for consultation and advice.
- 5.—Provision of hospital accommodation for maternity cases at Old Whint Hospital.
- 6.—Provision of hospital accommodation for debilitated and ailing children at Old Whint Hospital.
- 7.—Provision of hospital accommodation at Peasley Cross Isolation Hospital for cases of puerperal fever and septic confinement cases, and for ophthalmia neonatorum.
- 8.—Provision of home nursing for cases of measles in children under 5 years of age.
- 9.—Supply of milk at less than cost price to infants, and nursing and expectant mothers.
- 10.—Provision of maternity bags for necessitous cases.
- 11.—Provision of treatment for minor ailments and dental defects in necessitous cases.

During the year 2615 births were registered and the death of 239 infants under one year of age occurred, giving an infantile mortality of 91.3 per thousand births. A consideration of the causes of these deaths is given in that part of the report dealing with Vital Statistics.

Table 10 shows the infant death rate for St. Helens since 1873 and the figures for England and Wales for the same period.

**NOTIFICATION OF BIRTHS.**—Under the Notification of Births Acts 2561 live births and 90 still births were notified during the year. Of these 2599 were notified by midwives and 399 by doctors and parents.

## INSPECTION AND SUPERVISION OF MIDWIVES.—

There were 37 midwives on the register as practising in the Borough during the year.

The qualifications of these midwives were as follows :—

Holding the certificate of the Central Midwives Board	...	...	...	...	...	24
Having other recognised certificates	...	...	...	...	...	9
Untrained	...	...	...	...	...	4

During the year two midwives whose names had previously been moved from the Midwives' Roll, applied for certificates in support of their application for restoration to the roll. In neither case did the Local Authority feel justified in supporting the application.

Inspections of midwives were carried out on 17 occasions by medical officers, and the health visitors paid 65 routine and 158 special visits for purposes of inspection and supervision. In 2 instances it was considered necessary to suspend a midwife from practice for 24 hours after contact with an infectious case, to allow of the disinfection of herself and appliances.

During the year the midwives found it necessary to call medical practitioners to their assistance on 743 occasions. The reasons for sending and the number of occasions in which medical assistance was required were as follows :—

(a) For abortions and premature labours	...	...	68
(b) For ante-natal illnesses	...	...	45
(c) For difficult confinement	...	...	357
(d) For suturing the perinæum, expelling the placenta, excessive hæmorrhage, etc.	...	...	140
(e) For post-natal illnesses	...	...	39
(f) For the child	...	...	94

Under the Midwives' Act, 1918, the Local Supervising Authority is responsible for the payment of the fees of doctors called in by the midwives and have power to recover from the

patient the whole or part of fees so paid. During the financial year 1923—24, £1,057 was paid to medical practitioners for this service, and £527 recovered from the patients.

**HEALTH VISITING.**—The following statement shows the visits paid by health visitors during the year :—

To expectant mothers—first visits	...	783
To expectant mothers—subsequent visits	...	1077
To infants under 1 year—first visits	...	2705
To infants under 1 year—subsequent visits	...	10790
To children 1—5 years old	...	22353
<hr/>		
Total Visits	...	37708
<hr/>		

**MATERNITY AND CHILD WELFARE CLINICS.**—

Maternity and Child Welfare Centres are established at the Town Hall (open 3 days a week), Albion Street (open 3 days a week), Marshall's Cross (open 1 day a week), and Elizabeth Street (open 1 day a week).

At the centres combined clinics for expectant and nursing mothers and for children under 5 years of age are held, and the clinics are so arranged that the mothers may come on those days on which the health visitor for their own district is in attendance. The medical work is carried out by the assistant medical officers, and short 'talks to mothers,' and demonstrations are given by the medical officers or health visitors.

In January 1924 a special ante-natal clinic was opened at the dispensary in Claughton Street for pregnant women who require special examinations or supervision. To this clinic are referred all cases where there is reason to suspect abnormality or where the history of previous pregnancies point to the need of careful supervision. It is hoped to develop this work more extensively in future. Increased care of the expectant mother is necessary not only for the sake of the mother, but, as pointed out previously, it is essential if any reduction is to be made in the large number of infant deaths under 1 week old.

The attendances at the centres during 1923 were:—

**MATERNITY HOSPITAL.**—The old Small-pox Hospital at Old Whint continues to be used for maternity cases and for weakly and ailing infants. Despite its many and well known disadvantages it continues to do good and valuable work. During the year 76 ante-natal and 12 post-natal cases were admitted and 57 confinements were conducted. The average duration of stay was 26 days.

Table 23 gives a general summary of the maternity cases dealt with, and Table 24 shows the complications requiring medical assistance.

**CHILDREN'S HOSPITAL ACCOMMODATION.**—At Old Whint Hospital there is a children's ward to which are admitted weak, debilitated and ailing children. During the year there were 117 infants dealt with, of whom 64 were discharged in good health, 20 were discharged improved and 10 cases returned home before any improvement could be effected. 23 children died in the hospital. The general summary of the cases dealt with is shown in Table 25, whilst Table 26 shows the reasons for admission and Table 27 the causes of the deaths that occurred.

**PUERPERAL FEVER.**—4 cases of Puerperal Fever were notified during the year and 1 death occurred, giving a death rate of 0.38 per thousand births. Cases of puerperal fever and septic puerperal conditions are admitted into Peasley Cross Isolation Hospital.

**MEASLES.**—Home nursing of cases of Measles is carried out when required by trained nurses from the medical officer's staff.

Table 23.  
General Summary of Cases in Old Whint Maternity Hospital, 1923.

Number of cases admitted.		Average Duration of stay in days.	Number delivered by Doctor.	Number delivered by Midwives.	Number notified as Puerperal Sepsis.	Number in which Temperature rose above 100.4.	Number of cases of Ophthalmia Neonatorum	Number of cases of Inflammation of Eye	Number of children not entirely fed in Institution with reasons.	Still-born	
Ante Natal	Post Natal									Number of Foetal Deaths with causes.	Foetal Deaths due to prematurity
76	12									1	1
88	26			14		43		Nil.	1	2	12

Weakness and inability to suck owing to prematurity.

**Table 24.**  
Old Whint Maternity Hospital.

Table showing number of cases in which medical assistance was sought by the resident midwife during 1923 with reasons for requiring assistance.

ANTE NATAL.			DURING LABOUR.					AFTER LABOUR.		FOR INFANT
2	1	Albuminuria								
2	2	Hyperemesis Grav.								
	1	Ante-partum Hæmorrhage	+	Contracted Pelvis.						
5										
			2	Secondary Uterine Inertia						
			4	Occipituo Posterior Position						
				1	Eclampsia					
				2	Rigid Perineum.					
				1	Placenta Prævia					
			14					2	1	
								3		1

**Table 25.**  
General summary of cases in Hospital for Children at Old Whint.

NUMBER OF ADMISSIONS	AVERAGE DURATION OF STAY IN DAYS.	NO. OF CASES DISCHARGED.				NO. OF CASES OF INFECTIOUS DISEASE.			
		No Improvement.	Improved.	In Good Health.	Discharged on Account of Illness.	Measles.	Whooping Cough.	Epidemic Diarrhoea.	Other Infections.
117	43	10	20	64	Nil.	Nil.	Nil.	Nil.	Nil.

**Table 26.**

Table showing reason of admission of children to Old Whint Hospital with number of cases under each heading.

Reason of Admission.	Number.
Marasmus, Malnutrition	63
Convulsions	4
Bronchitis and Broncho-Pneumonia	16
Meningitis	2
Diarrhoea and Vomiting	4
Congenital V.D.H.	3
„ Syphilis	1
Rickets	3
Nephritis	3
Prematurity	3
Impetigo Skin Diseases	11
T.B. Mesenteric Glands	3
Tubercular Arm	1
	117

Table 27.

Table showing deaths of children at Old Whint Hospital, with dates and causes, period of residence, and ages.

Date.	Cause of Death.	Days in Hospital.	Age.
27—1—23	Congenital Syphilis .....	27	3 months
14—1—23	Prematurity .....	5	5 days
21—1—23	Bronchitis and Convulsions.....	13	3 months
5—1—23	Bronchitis Meningitis .....	2	13 months
10—3—23	Marasmus .....	49	6 weeks
27—3—23	T. B. Peritonitis .....	19	9 months
23—4—23	Congenital V.D.H. ....	18	9 months
20—4—23	Congenital V.D.H. ....	15	3 months
16—4—23	Marasmus and Inanition .....	2	2 months
15—5—23	Marasmus and Inanition .....	27	4 months
13—5—23	Prematurity and Inanition .....	4	2 weeks
6—5—23	Cardiac failure .....	13	5 months
11—7—23	Convulsions .....	9	10 weeks
6—8—23	Convulsions .....	9	7 weeks
12—8—23	Prematurity and Convulsions .....	1	10 weeks
20—10—23	Mongolism and Marasmus .....	107	12 months
21—10—23	Marasmus and Inanition .....	32	4 months
22—10—23	Marasmus and Convulsions .....	4	14 months
26—10—23	Broncho Pneumonia .....	1	2 years
17—11—23	Marasmus .....	135	7 months
11—11—23	Congenital V.D.H. ....	7	5 months
4—12—23	Marasmus and Inanition .....	17	3 months
14—12—23	Convulsions and Pneumonia .....	2	6 months

**MILK FOR MOTHERS AND INFANTS.**—At each maternity and child welfare centre full cream dried milk is on sale at cost price. When however the financial circumstances of the home warrant it, the milk powder is supplied free or at less than cost price. This is done under the Maternity and Child Welfare Act, 1918, and in accordance with the regulations of the Ministry of Health.

During the year approximately 237 cwt. of the dried milk were disposed of, and of this, 10057 lbs. were issued free and 1340 lbs. at less than cost price.

Cod Liver Oil Emulsion and Virol are also provided at the Centres at cost price or free in suitable cases.

**MATERNITY BAGS.**—Maternity bags are issued on loan to cases in which the mother has been unable to make the necessary provision. Bags have been lent out in 64 cases during the year.

**MINOR AILMENTS AND DENTAL DEFECTS.**—During the year 7 mothers and 180 children received treatment for minor ailments, and 30 mothers and 19 children received dental treatment at the school clinic.

Arrangements have also been made for the Dentist to visit Old Whint Hospital once a week, and advise the mothers regarding treatment and carry out any urgent treatment required. Cases requiring further treatment are recommended to attend the clinic after discharge from hospital.

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## **VIII.—LABORATORY WORK.**

A laboratory is provided at the Town Hall, and examinations of material from suspected cases of disease are made by the medical staff. The following table shows the investigations carried out during 1923.

Specimens.	Number Received.	Results.	
		Positive.	Negative.
Swabs for Diphtheria .....	1386	64	1322
Blood for Typhoid Fever.....	28	3	25
Sputa for Tuberculosis .....	698	159	539
Hairs for Ringworm.....	57	33	24
Pus and other fluids and dis- charges for various organisms	36	21	15
Other Specimens .....	64	41	23
Total.....	2269	321	1948

Outfits for the collection of specimens of sputa, blood specimens, throat swabs, etc., are supplied free of charge.

## IX.—LIST OF ADOPTIVE AND LOCAL ACTS, BYELAWS, AND LOCAL REGULATIONS AND ORDERS.

relating to the public health, in force in the district.

### ADOPTIVE ACTS.

The Infectious Disease (Notification) Act, 1889, applied to:

- (1) Ophthalmia Neonatorum, by Order of the Local Government Board, which came into force on the 7th April, 1910.
- (2) Acute Poliomyelitis and Cerebro Spinal Fever, by Order of the Local Government Board, which came into force on the 19th February, 1912.

The Infectious Disease (Prevention) Act, 1890. Adopted 7th January, 1891.

The Public Health Acts Amendment Act, 1890. Parts II and III adopted 1st April, 1891. Part IV adopted 1st July 1923. Part V adopted 24th October, 1894.

Public Health Acts Amendment Act, 1907, Sections 78, 79, 80, 81, 85, 88, 89 and 90, put in force 1st January, 1909. Sections 19, 25, 26, 27, 29, 32, 33, 34, 35, 36, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 66, 67, 68, 93, and 95, and Part V, put in force 23rd August, 1909.

### **LOCAL ACTS with Sanitary Clauses.**

The St. Helens Improvement Act, 1869.

The St. Helens Corporation Act, 1893.

The St. Helens Corporation Act, 1898.

The St. Helens Corporation Act, 1911.

The Ministry of Health Provisional Orders Confirmation (No. 2) Act, 1920 ; confirming the St. Helens Order, 1920, as to Tuberculosis.

The St. Helens Corporation Act, 1921.

### **BYELAWS.**

Byelaws as to Nuisances, confirmed by the Home Office, 11th May, 1870.

Byelaws as to Slaughterhouses, made by the Council on the 2nd March, 1870.

Byelaws with respect to Streets and Buildings, made by the Council on the 14th October, 1893.

Byelaws with respect to New Buildings, made by the Council on 2nd August, 1905.

Byelaws as to Alteration of Buildings, made by the Council on the 7th August, 1907.

Byelaws with respect to the Structure of Staircases and Ventilation of Buildings, made by the Council on the 3rd May, 1911.

Byelaw with respect to the Height of Rooms intended to be used for Human Habitation, made by the Council on the 1st April, 1914.

Byelaws with respect to Common Lodging Houses, made by the Council on the 2nd May, 1894.

Byelaws with respect to Houses let in Lodgings, made by the Council on the 2nd May, 1894.

Byelaws with respect to Female Domestic Servants' Registries, made by the Council on the 1st December, 1909.

Byelaws with respect to the Supply of Water, made by the Council on the 6th June, 1900.

Byelaws with respect to Cisterns, Waterclosets and Urinals, made by the Council on the 1st February, 1922.

Byelaws as to Spitting, made on the 23rd August, 1911.

## REGULATIONS.

Regulations with respect to Dairies, Cowsheds and Milkshops, made by the Council on the 2nd May, 1894, and Further Regulations made by the Council on the 28th October, 1910.

Regulations as to Public Abattoir and Cold Air Stores, made by the Council on the 2nd May, 1906.

## ORDERS—SHOP ACTS.

General Weekly Half-Holiday Order, made on the 7th August, 1912.

Weekly Half-Holiday Extension Order (Butchers and Chemists) made on the 4th December, 1912.

Closing Order (Motor, Cycle and Aircraft dealers) confirmed by the Home Secretary on the 30th January, 1913.

Closing Order (Tailors, etc. Shops) confirmed by the Home Secretary on the 10th December, 1915.

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## X.—FOOD.

**MILK.**—Twenty-three persons are registered as cow-keepers and there are about 235 cows kept for dairy purposes within the borough. The animals are inspected regularly by the Veterinary Surgeon appointed by the Council.

At the end of 1923 there were 74 persons registered as purveyors of milk, and during the year 442 visits for inspection purposes were paid to the dairies and milk-shops.

With the introduction of the Milk (Special Designations) Order of 1923, opportunity is given for the supply of milk of a higher grade than that generally retailed. Under the order four classes of milk are specially "designated" namely "Certified" "Grade A (Tuberculin Tested)," "Grade A" and "Pasteurised," and for each grade special requirements are laid down dealing with the health of the cow, the handling of the milk, and the cleanliness of the milk as regards its bacterial content when pur-

chased by the consumer. Whilst in no way suggesting that milk as ordinarily sold should be other than of the best quality and cleanliness it must be recognised that it is not always so. These "designated" milks carrying as they do some guarantee as to bacterial purity, and therefore freedom from disease germs, could be a distinct improvement on the present milk supply. It is estimated that to cover the extra cost in production and dealing with "Grade A" (i.e., the designated milk with the fewest restrictions) the increased cost to the consumer should be less than 1d. per pint. To encourage its introduction into St. Helens the Health Committee were prepared to use "Grade A" milk in the hospitals under their control, but up to the present it has not been possible to get a supply. There is no doubt that the producers in this neighbourhood are very backward in taking up these milks and this is greatly to be regretted. The producers are not however entirely to blame. Until the public demand bacterially clean milk few producers or dealers are going to spend money in taking the precautions necessary to produce the cleanest possible supply.

As an alternative to the supply of "Designated" milks some dealers in St. Helens are selling "Bottled" milk. Some milks have been known to have been bottled at the farm and distributed in the same bottles to the consumer, others have been known to come to St. Helens by rail and to be then bottled and distributed. In no case is the dealer licensed under the "Milk (Special Designations) Order, 1923, so that in regard to bacterial purity there can be no guarantee such as is implied by selling a grade of milk designated in that order. Milk should come from healthy cows and should be dealt with from the cow to the consumer in such a way that the minimum of contamination gets into it. For the dealer to attempt to clean milk hours after it has become contaminated is tackling the milk problem at the wrong end. Such a process may remove grosser impurities such as straw and grit but it is doubtful if will appreciably affect the bacterial content. There is one very serious objection to the process, namely that it may in time lead the farmer to take less rather than more care in obtaining clean milk ; hence the milk to be cleaned by the retailer will become dirtier and dirtier and the "cleaned" milk will contain correspondingly more bacteria. Regarding the bottling of milk this is a distinct advance in the right direction. Delivery of milk to the consumer in a properly sealed bottle prevents all that contamination which it would otherwise receive during the ordinary

process of delivery. It also tends to the better preservation of the milk in the home as it obviates the dangers of dirty or uncovered jugs. But here again the first principle is that the milk should be "bacterially" clean when bottled, and then that the whole process of bottling be under the most careful supervision. Unless these points are strictly attended to, the bottling of milk may be dangerous, in that it gives the public a false sense of security.

With a view of testing the relative purity of these bottled milks, samples have been taken from time to time during the current year.

Of 31 samples (12 of bottled and 19 of ordinary milk) recently examined two samples of bottled milk were the only ones containing Tuberle Bacilli. Further a comparison of the results of examination of samples of bottled and of ordinary milk, taken and examined at approximately the same times, shows that these bottled milks are not always the cleanest if cleanliness be judged by the number of bacteria present. This is shown in the following statement of the results of examination of three separate batches of samples.

	Sample No.	Class of Milk.	Bacteria per cubic centimetre.
Batch A.			
	162	Bottled	314,000,000
	165	Bottled	Innumerable
	166	Bottled	133,000,000
	163	Ordinary	Innumerable
	164	Ordinary	46,000,000
	167	Ordinary	88,800,000
Batch C.	179	Bottled	1,400,000
	180	Ordinary	320,000,000
Batch D	240	Bottled	Innumerable
	242	Bottled	Innumerable
	243	Bottled	720,000
	245	Bottled	7,020,000
	239	Ordinary	75,600,000
	241	Ordinary	Innumerable
	244	Ordinary	3,500,000
	246	Ordinary	1,080,000

Even amongst the bottled milks there is great desparity in bacterial purity. To quote one instance only, in a batch of three samples of bottled milk taken and examined at approximately the same time the total number of bacteria per cubic centimetre were respectively, 170,000 ; 600,000 ; and 2,680,000,000 and the number of colon bacilli 2,000 ; 5,000 ; and 26,000 per c.c.

Consideration of these reports shows how uncertain may be the gain in "bottled" milk.

**MEAT.**—There is a municipal abattoir with cold stores attached. Slaughtermen are licensed by the Committee and all animals killed are inspected by a qualified meat inspector.

There are two private slaughterhouses in the borough licensed for the slaughter of pigs only.

Table 28 shows the number of animals slaughtered and the approximate weight in lbs. of meat found diseased.

There are a number of shops where sausages are made and these, together with the butchers' shops, were regularly inspected during the year.

**Table 28.**

Number of Animals slaughtered and amount of diseased meat condemned during 1923.

1923	ABATTOIR.				PRIVATE SLAUGHTER HOUSES.			
	Number of Animals Slaugh- tered.	No. of Animals found diseased.		Weight in lbs. of Meat Con- demned	Number of Animals Slaugh- tered.	No. of Animals found diseased.		Weight of Meat in lbs. Con- demned
		Tuber- culosis.	Other diseases.			Tuber- culosis.	Other diseases.	
Beasts .....	3,885	314	356	34,682	—	—	—	—
Calves .....	640	3	5	112	—	—	—	—
Sheep.....	1,448	—	3	119	—	—	—	—
Pigs .....	7,322	123	116	7,602	2,638	83	12	1,012

**BAKEHOUSES.**—There are 114 bakehouses on the register—one is underground. Mechanical power is used in 14 instances. Four defects were found during the year and after notice each was remedied.

**UN SOUND FOOD.**—During the year as the result of inspection approximately 1,540 lbs. of fish, 1,900 lbs. of tripe, 3,584 lbs. of fruit, and a quantity of other food stuffs were found to be unsound and were destroyed.

**FOOD AND DRUGS ACTS.**—During the year 154 Formal samples and 5 Informal samples were taken.

The nature of the samples taken with the result of examinations by the Public Analyst are shown in Table 29.

The appended statement shows the action taken in the case of the adulterated samples.

(a)—Legal proceedings instituted under the Sale of Food and Drugs Acts :—

NIL.

(b)—No legal proceedings instituted, but the seller in each case warned :—

Sample 2924.	Milk ...	...	...	6 grains of dirt per gallon.
„ 2928.	Milk ...	...	...	8 grains of dirt per gallon.
„ 2936.	Milk ...	...	...	3% deficient in fat.
„ 2941.	Milk ...	...	...	3% deficient in fat.
„ 2950.	Milk ...	...	...	5% deficient in fat.
„ 2901.	Milk ...	...	...	4 grains of dirt per gallon.
„ 2902.	Milk ...	...	...	2% added water and 2 grains of dirt per gallon.

**MILK AND CREAM REGULATIONS.**—119 samples of milk and 4 samples of cream were examined during the year, but in no instance was any preservative discovered.

Five samples of preserved cream was purchased for analysis, and in one sample boric acid was in excess of that allowed by the Regulations to the extent of 17%.

In two instances infringements of the requirements as to labelling was detected.

The sellers were interviewed and warned in all cases.

**Table 29.**

Number of samples taken under the Food and Drugs Acts and results of analysis by the Public Analyst.

ARTICLE	No. of Samples Taken.	No. found to be genuine.	No. Adul- terated.
Milk ... ... ...	119	112	7
Butter ... ... ...	6	6	—
Margarine ... ... ...	11	11	—
Tea ... ... ...	1	1	—
Cocoa ... ... ...	1	1	—
Lard ... ... ...	7	7	—
Sausages ... ... ...	1	1	—
Tinned Foods ...	4	4	—
Iceline ... ... ...	1	1	—
Dried Milk ... ...	2	2	—
 Total ...	153	146	7

## XI.—GENERAL SANITARY ADMINISTRATION.

**SANITARY INSPECTION OF DISTRICT.**—The total number of visits paid by the sanitary inspectors was 7894. Table 30 contains a list of the notices served during 1923 and a record of the defects remedied.

**Table 30.**

Sanitary defects—Number of notices served 1923.

Reason for Inspection and Notice.	Preliminary notices served	Statutory notices served	Number remedied	Number <i>not</i> remedied at end of year.
To clear choked drains and w.c.'s	200	164	200	0
„ provide new and repair drains	24	26	26	0
„ provide and repair slopstones	44	40	42	2
„ repair w.c.'s, baths, basins, lavatories, and cisterns	101	78	100	1
„ repair roofs to dwelling houses	154	138	150	4
„ cleanse back yards and filthy dwellings	16	4	16	0
„ provide sufficient ashpit, ash-place, privy, pail closet, and w.c. accommodation	280	284	272	12
„ provide or repair eavessgutters and downspouts	158	164	151	13
„ repair pavement in yards and floors in dwellinghouses	136	111	132	4
„ remove fowls, pigs, offensive matter from near dwelling-houses	16	7	16	0
„ abate overcrowding of dwelling houses	6	2	6	0
„ plaster walls and ceilings and prevent dampness of dwelling	206	197	200	6
„ remedy defects in workshops	9	3	9	0
„ remedy defects in cowsheds and dairies	1	0	1	0
„ remedy miscellaneous nuisances	281	224	270	11
„ convert to water carriage system	15	774	499	275
<b>Totals .. .. ..</b>	<b>1647</b>	<b>2216</b>	<b>2090</b>	<b>328</b>

**Closet Accommodation.**—At the end of the year 1491 privy middens and 2125 tub and pail closets were estimated to be still in existence in the borough. Approximately 55 of the tub and pail closets are not in use and will probably be abolished. During the year 132 privy middens and 367 tub and pail closets were converted to the water carriage system.

**Table 31.**

The number of houses with the various types of sanitary conveniences existing in the borough.

Year.	Water closet.	Tub and pail closet.	Privy midden.	Total.
1907 ...	6,196	7,150	5,154	18,410
1908 ...	6,503	7,120	4,907	18,530
1909 ...	6,718	7,071	4,795	18,584
1910 ...	7,041	7,028	4,616	18,685
1911 ...	7,626	6,863	4,338	18,827
1912 ...	9,205	5,734	4,019	18,958
1913 ...	10,493	5,058	3,542	19,093
1914 ...	12,316	4,058	2,829	19,203
1915 ...	13,100	3,704	2,529	19,333
1916 ...	13,298	3,592	2,472	19,362
1917 ...	13,455	3,422	2,353	19,230
1918 ...	13,504	3,401	2,325	19,230
1919 ...	13,794	3,259	2,177	19,230
1920 ...	14,447	2,890	1,893	19,230
1921 ...	14,765	2,692	1,818	19,275
1922 ...	15,315	2,492	1,623	19,430
1923 ...	15,859	2,125	1,491	19,475

**Table 32.**

The number of conversions to the water carriage system completed each year since 1904.

Year.	Privies.	Tub and pail closets.	Total.
1904	69	67	136
1905	80	64	144
1906	47	19	66
1907	237	125	362
1908	243	24	267
1909	106	38	144
1910	179	33	212
1911	270	129	399
1912	301	691	992
1913	460	646	1,106
1914	691	976	1,658
1915	300	380	680
1916	57	112	169
1917	45	103	148
1918	18	21	39
1919	148	142	290
1920	284	369	653
1921	75	198	273
1922	45	350	395
1923	132	367	499

Table 31 shows the estimated number of houses with the various types of sanitary conveniences existent in the borough each year since 1907, and Table 32 the number of conversions completed each year since 1904.

A detailed report, dealing with the cost to the Corporation of the conversion scheme since 1911 and giving the estimated cost for completion of the scheme, was submitted to the Health Committee at the beginning of 1924. This report, which is printed as an Appendix to the Annual Report, shows the Corporation's share for completion of conversion of all tub and pail closets and all privy middens to be £25,564 and the cost of the supply of tippler bins in lieu of ashplaces to be £1,012. The Council decided to apply to the Ministry of Health for permission to borrow £26,600 for this work. On 21st August, 1924, the Ministry, after holding an Inquiry, gave sanction for the borrowing of (a) £22,007 for all expenditure relative to conversions except the provision of bins, and (b) £4,570 for the provision of ashbins.

**Scavenging.**—Removal of house refuse and the emptying of pail closets and privy middens are carried out by the Borough Engineer's Department. All of the house and trade dry refuse is now tipped at Parr.

**OFFENSIVE TRADES.**—There are nine offensive trades carried on in the borough. Seven of these are tripe boilers, one a tallow melter, and one a gut scraper.

**COMMON LODGING HOUSES.**—There are five common lodging houses registered for the accommodation of 223 lodgers. During 66 inspections, 3 infringements of byelaws were discovered and dealt with.

**HOUSES LET IN LODGINGS.**—There are only 15 houses registered in the borough as let in lodgings, but there are a considerable number which though not registered are being used for this purpose. These will have to be dealt with as soon as the present house shortage has been overcome.

**FACTORY AND WORKSHOPS ACTS.**—Factories—Eight notices of defects remediable under Public Health Acts were received from H.M. Inspector of Factories. In all 17 inspections were made and all defects remedied.

Workshops :—The number of workshops registered is 187. During the year 322 inspections of these premises were made and as a result 12 notices regarding defects found were issued. All defects found were remedied during the year.

Table 33 shows classes of workshops registered.

Outworkers :—No lists of outworkers were received from employers during the year.

**Table 33.**  
Registered workshops.

Workshops on the Register (s. 131) at the end of the year.						Number
1	Dressmakers and mantle making	.....	.....	.....	.....	16
2	Milliners	.....	.....	.....	.....	18
3	Tailors	.....	.....	.....	.....	15
4	Hosiery Knitters	.....	.....	.....	.....	4
5	Joiners, builders, cabinet-makers and plumbers, etc.	.....	.....	.....	.....	23
6	Blacksmiths, wheelwrights, coach builders and masons	.....	.....	.....	.....	10
7	Weighing machine repairers	.....	.....	.....	.....	3
8	Cloggers and boot repairers	.....	.....	.....	.....	47
9	Cycle makers	.....	.....	.....	.....	1
10	Cooper	.....	.....	.....	.....	1
11	Tripe Dressers	.....	.....	.....	.....	7
12	Herbal Brewer	.....	.....	.....	.....	5
13	Pearl Ash Manufacturer	.....	.....	.....	.....	—
14	Seltzogene, charge maker	.....	.....	.....	.....	1
15	Tea wrapping	.....	.....	.....	.....	—
16	Drysalter	.....	.....	.....	.....	—
17	Leadlight makers	.....	.....	.....	.....	1
18	Cab washing	.....	.....	.....	.....	3
19	Saddler	.....	.....	.....	.....	1
20	Knackers Yard	.....	.....	.....	.....	1
21	Sundries	.....	.....	.....	.....	22
22	Ice Cream Makers	.....	.....	.....	.....	8
Total number of Workshops on Register						187

**RATS AND MICE DESTRUCTION ACT, 1919.**—Inspections under this Act are carried out by the Rat Officer. A Corporation rat catcher is not now employed. Many complaints regarding infested premises and dwelling houses were received during the year and all were satisfactorily dealt with. All piggeries, shippings, fish and meal merchants premises, etc., etc. were visited and the occupiers advised.

**SHOPS ACTS, 1912—1922.**—During the year 470 inspections were made. Infringements of the Acts were discovered on 14 occasions and those responsible were warned. In no instance were legal proceedings instituted.

**CANAL BOATS ACT.**—No Canal Boat was inspected during the year.

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## HOUSING.

The house shortage in St. Helens is more acute than ever, and conditions under which many of the inhabitants are living are daily becoming worse.

During 1923 only 45 new houses were erected in the borough. Of these 33 were part of the development of Sutton Manor by the Sutton Manor Collieries Ltd., the remainder being erected by private enterprise. Though no houses were completed by the Corporation in 1923, building operations for a further 20 on the Windlehurst Estate were commenced in October of that year.

The number of dwelling houses erected in each ward since 1904 is shown in Table 34.

The work carried out by the Department during the year under the Public Health and Housing Acts and Housing Regulations was as follows :—

### 1.—Unfit Dwelling Houses.

Inspection—(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts).....	1382
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(2) Number of dwelling houses which were inspected and recorded under the Housing Inspection of District) Regulations, 1910.....	Nil.
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .....	377
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation.....	186

## 2.—Remedy of Defects without Service of formal notices.

Number of defective dwelling houses rendered fit in consequence of informal action by the local Authority or their Officers.....	877
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## 3.—Action under Statutory Powers.

A. Proceedings under section 28 of the Housing, Town Planning, etc. Act, 1919.....	Nil.
B. Proceedings under Public Health Acts,	
(1) Number of dwellings in respect of which notices were served requiring defects to be remedied .....	505
(2) Number of dwelling houses in which defects were remedied :—	
(a) by owners .....	445
(b) by Local Authority in default of owners .....	60
C. Proceedings under Sections 17 and 18 of the Housing, Town Planning, etc. Act, 1909.....	Nil.

**Table 34.**

The wards of the borough in which dwelling houses have been erected during the years mentioned.

Year.	North Eccleston	South Eccleston	Central	North Windle	South Windle	Hardshaw	East Sutton	West Sutton	Parr	Total
1904	105	53	7	37	18	47	59	1	70	395
1905	19	93	1	44	16	90	42	10	54	366
1906	11	51		31	13	31	73	24	39	260
1907	22	38		26	—	22	77	3	29	219
1908	2	52		4	2	27	22	—	20	127
1909	—	36		10	—	10	6	3	10	75
1910	2	31		10	—	24	18	—	25	110
1911	14	20		—	—	30	75	26	12	177
1912	35	28		4	—	26	28	58	1	180
1913	10	31		—	3	19	14	99	6	182
1914	10	42		9	16	14	20	63	29	203
1915	6	9		26	1	2	8	25	27	104
1916	0	12		1	1	2	4	16	16	52
1917	—	—		—	—	—	—	9	—	9
1918	—	—		—	—	—	—	3	—	3
1919	—	1	3	—	—	—	—	—	—	4
1920	—	—	—	—	—	—	—	—	—	—
1921	—	1	—	41	—	—	—	6	—	48
1922	—	1	—	164	—	—	—	—	—	165
1923	1	5	2	2	—	2	—	33	—	45

## APPENDIX.

### Report on the cost to the Corporation in carrying out the Conversion Scheme since 1911 and the estimated cost for completion of the scheme.

(Presented to the Health Committee, 22nd January, 1924).

#### HISTORY OF PREVIOUS SANCTIONS GRANTED.

In March 1911 the Corporation considered a joint report of the Medical Officer of Health and Borough Engineer as to converting pail closets in outlying districts as follows :—

Robins Lane .....	54
St. Helens Junction .....	83
Thatto Heath .....	427
Lugsmore Lane .....	203
St. Annes.....	53
Windle City.....	51
871	

The cost of conversion of one tub and pail closet was estimated to be £5/7/0 and, as the closets referred to could not be certified to be insufficient for the needs of the inhabitants or a nuisance or injurious to health, one half of the cost (namely £2/13/6) had to be borne by the Corporation (St. Helens Corporation Act, 1898, Section 80 (3) ). The estimated cost to the Corporation for conversion of these 871 tub and pail closets was therefore £2329/18/6, and in April, 1911, it was decided (Resolution 2 Health Committee, 7/3/11) to apply to the Local Government Board for permission to borrow this amount. On 20th November, 1911, sanction was given to borrow £2,330 (called hereafter Sanction "A").

In November, 1911 the Council considered a further report of the Medical Officer of Health and Borough Engineer and it was then resolved (Health Committee, 23/11/11, Resolution No. 1).

- (1) that all closet accommodation in the town, whether on the privy midden or the tub and pail system, be converted to the water carriage system, and

(2) that for the purpose of such conversion the Borough be divided into five districts and that the conversions in one of these districts be completed every year during the five succeeding years.

These districts with the estimated number and type of conveniences in use were as follows :—

	Privy Midden	Tub and Pail
(1) Bounded by Eccleston Street Boundary Road, Duke Street, Lowe Street, and Westfield Street	890	580
(2) Remainder of North Eccleston, South Windle and Central wards, and Cowley Hill portion of North Windle .....	748	2000
(3) South Eccleston and West Sutton wards .....	819	667
(4) Hardshaw ward and remainder of North Windle .....	753	1079
(5) Parr and East Sutton wards...	995	1323

The number of tub and pail closets in these areas was 5649, and, again estimating the cost of each conversion to be £5/7/0, the cost to the Corporation for the 5649 conversions was £15,111/1/6. To this amount was added the sum of £6044/8/4 estimated as required for work to be done by the Corporation in default of owners, making a total of £21155/9/10. It was decided to apply to the Local Government Board for sanction to borrow £18,000 for this work and on July 3rd, 1912 the Local Government Board gave sanction for 3/5ths of the amount asked for, namely for £10,800 (called hereafter Sanction "B"), this being the sum estimated to meet the total expenditure of the Corporation in the first three years of the work.

The number of privy middens to be converted was 4205, and, as the cost to the Corporation for the conversion of each privy midden was the cost of the fittings (Health Committee, 23/11/11, Resolution No. 2), and the estimated cost of each set of fittings (consisting of pedestal closet, flush pipe, and cistern) was 30/-, the estimated cost to the Corporation for these conversions was £6307/10/0. To this amount was added the sum

of £10,933, estimated as required for work to be done by the Corporation in default of owners, making a total of £17,240/10/0. It was expected however, that the full amount of £10933 would not be required inasmuch as part of each year's outlay would be recovered in succeeding years (page 110 Medical Officer of Health's Report 1911). It was resolved therefore to apply to the Local Government Board for sanction to borrow £9000 for this work, and on July 3rd, 1912 the Local Government Board gave sanction for the borrowing of £9000 (Sanction "C").

Sanction has therefore been obtained for borrowing the following sums of money for conversion purposes.

Sanction "A".....	For conversion of pail closets in certain of 20th Nov., 1911.	specified outlying districts .....	£2330	0	0
Sanction "B".....	For conversion of $\frac{3}{5}$ ths of all other pail of 3rd July, 1912.	closets in St. Helens .....	£10800	0	0
Sanction "C".....	For conversion of all privy middens .....	£9000	0	0	

#### PRESENT STATE OF LOANS.

To 30th September, 1923 the following was the state of each of these sanctions :—

Sanction "A".....	Expenditure to 30th Sept., 1923 .....	£3427	14	5
	Amount of Sanction .....	2330	0	0
	<hr/>			
	Overspending .....	1097	14	5
	<hr/>			
Sanction "B".....	Expenditure to 30th Sept., 1923 .....	£16911	14	10
	Amount of Sanction .....	10800	0	0
	<hr/>			
	Overspending .....	6111	14	10
	<hr/>			
Sanction "C".....	Amount of Sanction .....	£9000	0	0
	Expenditure to 30th Sept., 1923 .....	6718	17	8
	<hr/>			
	Underspending .....	2281	2	4
	<hr/>			

The reason of this overspending has been increased costings as follows :—

Privy middens — The original estimate for fittings was 30/- per set whereas the cost rose to a maximum of £5/8/2 in 1921 and in 1924 is £3/0/5.

Tub and pail closets—When the original estimate was made the cost to the Corporation for the conversion of a pail closet was estimated to be £2/13/6. This amount was made up of two items :—

- (a) The supply of fittings estimated to cost 30/-.
- (b) A money grant equivalent to the difference between the actual cost of fittings and the estimated Corporation share of £2/13/6.

Since then there has been a very considerable increase both in the cost of the fittings and of the constructional work, resulting in an increase in actual cost to the Corporation for fittings, and an increased money grant payable by the Corporation so that the Corporation might still pay half the total cost. At the present time these costs to the Corporation are £3/0/5 for fittings and £3/10/0 in money grant—a total of £6/10/5 in 1924 as against £2/13/6 in 1911.

Since September 1919 there has also been an additional cost to the Corporation in the supply of tippler bins free of cost in all cases where a privy midden on the No. 2 system or a pail closet was converted, (Resolution 1, Health Committee, 30/9/19 which reads: "Resolved that an owner of property who has been served with notice to convert either a privy midden on the No. 2 system which has not been certified to be a nuisance or a tub and pail closet to the water carriage system, (except nevertheless a privy midden on the No. 2 system or a tub and pail closet in respect of which a notice has been served before the 1st October 1919), carries out such conversions to the satisfaction of and at the time directed or sanctioned by the Corporation, and the Corporation are satisfied with the general sanitary requirements of the house to which such privy midden or closet is attached, or if the Corporation are not so satisfied and the owner makes such general sanitary improvements to the house

as may be directed by the Corporation, then the Corporation will supply such owner free of cost with a tippler-wall bin"). The cost of a tippler bin in 1919 was £2/11/9 and rose to £3/3/0 during 1920-21, whilst the present cost is £2/6/3.

## FUTURE REQUIREMENTS.

It will be convenient in dealing with the future requirements to take section "A" separately and Sanctions "B" and "C" together.

**Sanction "A"**—Of the 871 pail closets for which this sanction was given all excepting 43 have been converted. These are all in the Sutton District and would drain into the sewer which discharges directly into Sankey Brook just below the outfall from the sewage works. This sewer already takes the whole of St. Helens Junction, Marshalls Cross and Clock Face Area so that 43 might be considered a negligible number and work could proceed at once. The cost therefore might be calculated at present prices, and as they are not likely to be completed before 30th April, 1924 the grant would be £3 per closet. The following is the estimate for completing these 43 closets, regard being paid to the fact that some will be supplied with tippler bins and some with circular bins.

43 sets of fittings (less tippler bins) at £3/0/5 each	£129	17	11
43 Corporation grants of £3/0/0 each .....	129	0	0
24 Tippler bins at £2/6/3 each .....	55	10	0
12 Circular bins at 11/6 each .....	6	18	0
Total.....	£321	5	11

The position as regards this sanction is therefore as follows :  
 Expenditure to 30th September, 1923..... £3427 14 5  
 Estimated expenditure to complete (as above)..... 321 5 11

£3749	0	4	
Amount of sanction .....	2330	0	0
Overspending actual and required .....	£1419	0	4

**Sanctions "B" and "C"**—On December 1st 1923 there were still to be converted in St. Helens 2058 pails, 1471 privy middens and 25 closets on the No. 2 System.

For convenience I have divided these up into various roughly defined areas and show the type of bin likely to be provided. In considering this table it should be remembered that bins are only provided free in conversions of pail closets and closets on the No. 2 System.

				Bins to be supplied.	
	Pail Closets.	Privy Middens.	No. 2 System.	Tipplers.	Circulars.
1. Parr Area.....	780	500	—	624	156
2. Peasley Cross Area .....	170	60	—	85	85
3. Uncompleted Town Area	73	76	—	36	37
4. Gerards Bridge Area .....	184	55	—	147	37
5. Derbyshire Hill Area .....	50	190	25	60	15
6. Sutton Area .....	460	420	—	368	92
7. Area scheduled under the Housing Survey, 1919	231	70	—	115	116
8. Blackbrook, Chain Lane, Islands Brow, and Carr Mill Area .....	60	100	—	36	24
9. Works in St. Helens.....	50	—	—	—	—
	2058	1471	25	1471	562

It will now be convenient to discuss each of these areas separately with special reference to the time when the conversions are likely to be carried out.

1. *Parr Area*—Work is now proceeding in this area and it can be taken that these conversions will be completed before the end of the present year.
2. *Peasley Cross Area*—It is suggested that this be the next area for conversion. The sewer drains to the sewage disposal works and the conversions could be completed either during the present year or during 1925.
3. *Uncompleted Town Areas*—These include conversions which have been postponed because of small alterations required in the present sewers. It also includes a few where rebuilding is likely to take place and others where there has been delay owing to changes in ownership. I would suggest that these conversions be completed within the next two years.

4. *Gerards Bridge Area*—The sewer from this area discharges into the canal at Gerards Bridge. As there are approximately 550 other water closets discharging into the same sewer I would suggest that some means of disposal of this sewage, either by laying down a purification plant at Gerards Bridge, or sewerage to the present outfall works, be proceeded with in the next two years and the conversions required in this area be proceeded with then.
5. *Derbyshire Hill Area*—The sewer from this area discharges unpurified into Sankey Brook just below the outfall from the sewage works. As this sewer also drains the whole of the Lower Sutton, Marshalls Cross and Clock Face areas I would suggest that a scheme for dealing with this sewage be got out as soon as possible, and that the conversions in this district be done within about three years time.
6. *Sutton Area*—This area includes all the lower Sutton, Marshalls Cross and Clock Face (to Gartons Lane) districts and drains into the same sewer which takes the Derbyshire Hill Area, and my remarks regarding the necessity of a scheme for dealing with the sewage from Derbyshire Hill apply equally to this area. I would suggest that this area be converted within the next 3 or 4 years.
7. *Scheduled Areas*—These conveniences are in areas which, in the Housing Survey of 1919, it was suggested should be scheduled as insanitary areas. Some conversions might be carried out at present. Others might be left over until the housing shortage becomes less acute and it becomes possible to deal with these areas. For the purposes of an estimate I would suggest that all be calculated on the basis of costs in three years time.
8. *Blackbrook, Chain Lane, Islands Brow and Carr Mill Area*—There is no sewer in this area but I think that if the date of these conversions be taken as about four or five years hence it might be possible in the interval to find some means of dealing with the sewage.
9. *Works*—There are various works throughout the town where conversions still require to be carried out and these have been postponed owing to lack of sewers. I would suggest that either sewers be provided or means of disposal laid down, and these conversions be completed within the next two or three years.

Summarising these observations, should the work be carried out as suggested, this would mean conversions during the next four years as follows :—

Year.	District.	Pail Closets.	Privy Middens.	No. 2 System.	Tipplers.	Bins. Circulars.
1924	Parr, Peasley Cross,					
1925	Town and Works .....	1073	636	—	745	278
1926	Gerards Bridge, Derby-Hill, and scheduled areas .....	465	315	25	322	168
1927	Sutton, Blackbrook & Carr Mill areas .....	520	520	—	404	116
		2058	1471	25	1471	562

**Estimate for Sanction "B"**—In estimating the amount of money required for carrying out these conversions the estimate is based on present day cost of fittings for two years after which a  $12\frac{1}{2}\%$  reduction in the cost of fittings is made. The money grant given by the Corporation in the case of pail closets and privy middens in the No. 2 System is taken as £3/10/0 to 30th April, 1924, when it will be reduced to £3 with an estimated further reduction in 2 years to £2/10/.

Based on the above facts the following is the estimated expenditure necessary to complete the conversion of the tub and pails closets falling within the scheme for which sanction "B" was given.

1073 sets of fittings (excluding bins) at £3/0/5 each	£3241	7	1
985 sets of fittings (excluding bins) at £2/12/11 each	2606	2	11
745 Tippler bins at £2/6/3 each.....	1722	16	3
701 Tippler bins at £2/0/6 each.....	1419	10	6
278 Circular bins at 11/6 each.....	159	17	0
284 Circular bins at 10/1 each.....	143	3	8
500 Corporation Money Grants at £3/10/0 each...	1750	0	0
573 Corporation Money Grants at £3 each.....	1719	0	0
985 Corporation Money Grants at £2/10/0 each...	2462	10	0
	£15224	7	5

The position as regards this sanction therefore is as follows :

Expenditure to 30th September, 1923.....	£16911	14	10
Expenditure October and November, 1923.....	731	13	1
Estimated Expenditure to complete (as above)...	15224	7	5
	32867	15	4
Amount of sanction .....	10800	0	0
Overspending—Actual and Required .....	£22067	15	4

**Estimate for Sanction "C"**—The following is the estimated expenditure necessary to complete the conversion of privy middens and middens on the No. 2 System coming within the scheme for which this sanction was obtained.

636 sets of fittings at £3/0/5 each.....	£1921	5	0
860 sets of fittings at £2/12/11 each.....	2275	8	4
25 Tippler bins at £2/0/6 each.....	50	12	6
25 Corporation money grants at £2/10/0 each...	62	10	0
	£4309	15	10

The position as regards this sanction is as follows :—

Expenditure to 30th September, 1923.....	£6718	17	8
Expenditure October and November, 1923.....	48	8	8
Estimated expenditure to complete (as above)...	4309	15	10
	11077	2	2
Amount of sanction .....	9000	0	0
Overspending—Actual and required.....	£2077	2	2

## SUMMARY.

To make up the present amount overspent, and to pay for conversions yet to be completed the following money is required.

	Total amount required.
<b>Sanction "A"—</b>	
Pail closets-Outlying districts).....	£1419 0 4
<b>Sanction "B"—</b>	
(All other pail closets).....	22067 15 4
<b>Sanction "C"—</b>	
(All privy middens).....	2077 2 2
	<hr/>
	£25563 17 10
	<hr/>

## TIPPLER BINS.

By resolution of Health Committee of 27/1/20 it was "resolved that where an owner converts an ashplace suitable for a tippler bin the Corporation provide the bin free of cost." Up to the 1st December, 1923, 155 Tippler Bins have been supplied in accordance with this resolution at a total cost to the Corporation of £426/7/6. This cost has been charged to Sanction "B" above but no estimate has been given for future supply. Should it be decided to continue this as a charge against the conversions scheme I would suggest that provision be made for a further 500 calculated at the present price, less 12½%, i.e. a total of £1012/10/0. This will increase the total amount of money required as follows :

Amount required for conversion as shown in summary .....	£25563 17 10
Amount required for Tippler Bins in lieu of ashplaces .....	1012 10 0
	<hr/>
	£26576 7 10
	<hr/>

